

<400> 2508

Pro Gly Cys Cys Arg Tyr Leu Lys Glu Phe Arg Thr Glu Gln Cys Pro
 1 5 10 15
 Leu Phe Ser Gln His Lys Cys Ala Gln His Arg Pro Phe Thr Cys Phe
 20 25 30
 His Trp His Phe Leu Asn Gln Arg Arg Arg Pro Leu Arg Arg Arg
 35 40 45
 Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
 50 55 60
 Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
 65 70 75 80
 Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
 85 90 95
 Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
 100 105 110
 Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
 115 120 125
 Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
 130 135 140
 Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
 145 150 155 160
 Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
 165 170 175
 Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
 180 185 190
 Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
 195 200 205
 Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
 210 215 220
 Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
 225 230 235 240
 Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
 245 250 255
 Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
 260 265 270
 Gly Gly Gly Val Arg Glu
 275

<210> 2509

<211> 348
<212> DNA
<213> Homo sapiens

<400> 2509

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 gtggcgctgg acttcgtcga tgccccgcag gtttgctgc cccgcaccat tggactggac
 120
 gttcatgaac gggtgtggagcc cggcaaaaacc gaaactcaac caatccttgg ggatgctgga
 180
 cggcaggtt ccgaggggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc
 240
 caccgcgtccc agcggaatct cgttagactta gcgccagggt tggtaaggcg tgttagcggtc
 300

gtaacgacgg gtgacctcga actcggggct tcaaagtctt ctgctgtg
348

<210> 2510
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2510
Met Ala Pro Arg Gln Gly Pro Ile Leu Arg Ala Leu Val Ala Leu Asp
1 5 10 15
Phe Val Asp Ala Arg Glu Val Leu Leu Pro Ala Thr Ile Gly Leu Asp
20 25 30
Val His Glu Arg Val Glu Pro Gly Lys Thr Glu Thr Gln Pro Ile Leu
35 40 45
Gly Asp Ala Gly Arg Gln Val Ala Glu Gly Lys His Val Asp His Val
50 55 60
Arg Thr Asp Thr Thr Asp His Gly His Arg Ser Gln Arg Asn Leu Val
65 70 75 80
Asp Leu Ala Pro Gly Leu Val Arg Arg Val Ala Val Val Thr Thr Gly
85 90 95
Asp Leu Glu Leu Gly Ala Ser Lys Ser Ser Ala Val
100 105

<210> 2511
<211> 663
<212> DNA
<213> Homo sapiens

<400> 2511
nnacgcgtgt gggaccatat caggggagcc cgatggttct caggtaaggg ccggggtggt
60
tccctgacta ggctgctgtc gttggctccc gtcgtcaacg agcaagatct gcaagtgctc
120
cctgtcatcg cacacgtcgg ttatccgcag gccgcggacg agtattacca gttgctttta
180
gcattacgcc caggacgcgt tgctggcctg gcggagatcg tcgtcaacgg tcaacccttt
240
accgtcactg acgccactga ggatgaacta gctctcactg cttgggctcg tatcctcctc
300
gagggaaactc ccatcgccat ggatggatcg tggcagctgc atcgccgtcg agcgccccct
360
gagccagttc gttcgctaa gcgttcgggt ggtgagcaat cgaacacctc gatcatggtg
420
ggcgacgcca tcatcatcaa aatgttccgc cgctggagc cggcgcacaa ctttgacatc
480
accgtgcata gcgcctcaa cgatgccggg atctcatcg tggccacatt gtacggctt
540
atgtccggac agatccccgc tgaggaacac atcccggtcg atctagotat gatcattgag
600
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660
gac
663

<210> 2512

<211> 221

<212> PRT

<213> Homo sapiens

<400> 2512

Xaa Arg Val Trp Asp His Ile Arg Gly Ala Arg Trp Phe Ser Gly Lys
 1 5 10 15
 Gly Arg Gly Gly Ser Leu Thr Arg Leu Leu Ser Leu Ala Pro Val Val
 20 25 30
 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr
 35 40 45
 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro
 50 55 60
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe
 65 70 80
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala
 85 90 95
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln
 100 105 110
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg
 115 120 125
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile
 130 135 140
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile
 145 150 160
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr
 165 170 175
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro
 180 185 190
 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly
 195 200 205
 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp
 210 215 220

<210> 2513

<211> 368

<212> DNA

<213> Homo sapiens

<400> 2513

ctggctggaa tgcgtcaccc tacctgcaac ctggctgaga atgtgtccag caaaggtttgt
 60
 cagcttgacc tggccaagaa ccgcctctat caggccattc agagagctga tgacatcttg
 120
 gacctgaagt tctgcatgga tggagttcag actgctttga ggagtgaaga ttatgagcag
 180
 gctgcagcac atattcatcg ctacttgc ctggacaagt cggtcattga gctcagccga
 240
 cagggcaaag agggtcagca tccgaaactg gagcatgatt gatgccaaacc tgaaattgct
 300
 gcaggaagct gagcaacgtc tcaaagccat tgtggcagag aagtttgcca ttgccaccaa
 360

ggaaggta

368

<210> 2514

<211> 93

<212> PRT

<213> Homo sapiens

<400> 2514

Leu	Ala	Gly	Met	Ile	Thr	Phe	Thr	Cys	Asn	Leu	Ala	Glu	Asn	Val	Ser
1														15	
Ser	Lys	Val	Arg	Gln	Leu	Asp	Leu	Ala	Lys	Asn	Arg	Leu	Tyr	Gln	Ala
20														30	
Ile	Gln	Arg	Ala	Asp	Asp	Ile	Leu	Asp	Leu	Lys	Phe	Cys	Met	Asp	Gly
35														45	
Val	Gln	Thr	Ala	Leu	Arg	Ser	Glu	Asp	Tyr	Glu	Gln	Ala	Ala	Ala	His
50														60	
Ile	His	Arg	Tyr	Leu	Cys	Leu	Asp	Lys	Ser	Val	Ile	Glu	Leu	Ser	Arg
65														80	
Gln	Gly	Lys	Glu	Gly	Gln	His	Pro	Lys	Leu	Glu	His	Asp			
														85	
														90	

<210> 2515

<211> 351

<212> DNA

<213> Homo sapiens

<400> 2515

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gctcatcctg	gaccagaccc	tccctacccc	tccaaactcccc	caacaactgg	gcaattggaa
120					
tatcagtcca	tccctaaaag	ccaaaccaggc	tctcccgagg	gaggcaggaa	atccctgctc
180					
cctccatccc	ccacccggaa	tgctgcaggg	ggcttgagg	aggcgacaca	gtggggagct
240					
ctgggtgcag	gtgggcagac	aatggccaa	cacacccct	cagcccgct	ccagtatcag
300					
cattccagac	ccacccacct	gggccttgg	tcaccggag	acctcacgct	t
351					

<210> 2516

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2516

Met	Ala	His	Pro	Gly	Pro	Asp	Pro	Ser	Tyr	Pro	Ser	Asn	Ser	Pro	Thr
1														15	
Thr	Gly	Gln	Leu	Glu	Tyr	Gln	Ser	Ile	Pro	Lys	Ser	Gln	Pro	Gly	Ser
20														30	
Pro	Glu	Gly	Gly	Arg	Lys	Ser	Leu	Leu	Pro	Pro	Ser	Pro	Thr	Gly	Asn.
35														45	
Ala	Ala	Gly	Gly	Leu	Arg	Glu	Ala	Thr	Gln	Trp	Gly	Ala	Leu	Gly	Ala

```
<210> 2517
<211> 356
<212> DNA
<213> Homo sapiens

<400> 2517
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ggaggtggcc agtgagtcag gaggcgaaaa gggggggctag ggcttccccca ggggtcagga
120
cctgtcacca accaaacccc atgggcctat tcagcagccc caacttggct ggtctggccg
180
aggccacaca ttccctgggg actgagctcc aaggtgctgg gtccctgagc aggaagcggc
240
cagtgttgag tgggcagtgt ctcactccag cccctccat ccaggccagt tcttctcatc
300
tccctcagtc tttcccaagc aggcctcat ctacaggggca gacctgactg gctagc
356
```

```

<210> 2518
<211> 103
<212> PRT
<213> Homo sapiens

<400> 2518
Met Gly Ala Glu Gly Glu Asp Lys Arg Arg Trp Pro Val Ser Gln Glu
   1           5           10          15
Ala Gly Gly Gly Ala Arg Ala Ser Pro Gly Val Arg Thr Cys His Gln
   20          25          30
Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala
   35          40          45
Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu
   50          55          60
Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro
   65          70          75          80
Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg
   85          90          95
Pro Ser Ser Thr Gly Gln Thr
   100

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```
<210> 2519  
<211> 830  
<212> DNA  
<213> Homo sapien
```

<400> 2519

accgggtcagt ctgcgcggca gcaccgcacc ccggagccgc agctttctt cccgcttgccc
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cgacagccct ggtgccaagg cctgtcttag cccaccagg aggaagcgcg tgctggctgc
120
tctccatctg ctctggact ctggcctgtc gtttcctctg cctgccactc cccaaaccccg
180
tttcctcctc tgaaaactgg agctacacct gccccaacag ggcagaattt ccttaaatgg
240
cacaagacaa ttgcacagca gacccacctc ttctccaaag ttttcagggc ccaaacccag
300
acacccctt gcaggactca tggctaccgt gggctcgcac caccagcctc cccatgcgtt
360
ttccctgcctc tgctttgtc caatctgctc aatgacagaaa acgcgacaac agagggcact
420
ttctccaaac ccagctctcc ctgcagggtc ccatactgtc gtcacgctg agggcactct
480
accctgcctt ccgcagctca caggcagacc tggagcccgag tgactacagg gttggcctcc
540
tcatcttgcc accactcaca atgcccagca gtgttaaaat cccgcaggat gcacccgctt
600
ggaaaggcagt ccccaaagca gaatcgtaac cacatctgaa tagttctgc catcccaactg
660
acaggccagc atctaaaaga gatgtgcgtc gagcgtccgt tatgtggtgg cgtcgctgt
720
gtttcttaac cagaacgcaa aatcctgtga ccaggattat caccggctcg tttcatacat
780
gagacgggggg aagccaaagt aaccactcag gccacagcag aaaaacgcgt
830

```

<210> 2520
<211> 107
<212> PRT
<213> Homo sapiens

<400> 2520
Met Ser Pro Ala Arg Arg Cys Leu Gly Leu Gly Pro Glu Asn Phe Gly
   1           5           10          15
Glu Glu Val Gly Leu Leu Cys Asn Cys Leu Val Pro Phe Lys Val Ile
   20          25          30
Leu Pro Cys Trp Gly Arg Cys Ser Ser Ser Phe Gln Arg Arg Lys Arg
   35          40          45
Gly Trp Gly Val Ala Gly Arg Gly Ser Ser Arg Pro Glu Ser Gln Ser
   50          55          60
Arg Trp Arg Ala Ala Ser Thr Arg Phe Leu Leu Val Gly Leu Arg Gln
   65          70          75          80
Gly Leu Ala Pro Gly Leu Ser Gly Lys Arg Glu Glu Glu Leu Arg Leu
   85          90          95
Arg Gly Ala Val Leu Pro Arg Arg Leu Thr Gly
   100         105

```

```
<210> 2521  
<211> 4291  
<212> DNA  
<213> Homo sapiens
```

<400> 2521
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ccaggctgttta gccgcaggac cccaccaccc cccatggctc ccctggcctt ggtgggggtc
120
acactccctcc tggcggttcc cccatgttcc gggcagcca ccccaacccc ctccctgtcc
180
cctccccccgg ccaatgacag cgacaccaggc acagggggct gccaggggtc ctaccgttgc
240
cagccggggg tgctgttgc cgtgtggag cccgacgacc cgtcgctggg tgacaaggcg
300
gcacgggcag tggtgtactt tggccatg gtctacatgt ttctggagt gtccatcatc
360
gcccacgtt tcatggcggtc catcgagggtc atcacgtcaa aagagaagga gatcaccatc
420
accaaggcca acggtgagac cagcgtgggc accgttcgca tctggaatga gacgggttcc
480
aacctcacgc tcatggccctt gggctctcc gcacctgaga tcctgttgc agtcatcgaa
540
gtctcgccca acaacttcca ggccgggtgag ctggggccag gcaccatgt gggcagcgct
600
gccttcaaca tgggggtgtt catcgccgtg tgcatttacg tcatcccagc cggcgagagc
660
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720
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840
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960
gaggcccgag gtgagctggg cggcctgggc cggggccccc cccgaggcgcc cgagctggac
1020
gccagccgccc gcgagggtcat ccagatccctc aaggaccta agcagaagca cccggacaag
1080
gatctggagc agtgggtggg catgccaac tactacgcgc tgctgcacca gcagaagagc
1140
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1260
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1380
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1560

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1620 ctgtgcgcacccat cctggacgac gaccacgcag gcatttttc cttccaggac
1680 cgccctgtgc acgtgagcga gtgcattggc accgtggacg tgcgctgtgc ggcagctcg
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2100 aagaacacgg tggataaaact catcaagaaaa acgaacttgg ctttgtaat tgggaccat
2160 tcatggaggg agcagttttt agaggcaatt acggtagcga cagggacga ggaggaggag
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2280 acgggtttct ggaaggtgct cttcgccctgt gtgcggggggccca ccgagtactg ccacggctgg
2340 gcctgtttt gtgtctccat cctggtcatc ggctgtctca ccgcctctcat tgggaccctc
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2460 gcccggca cttccatccc tgacacgttc gccagcaagg tggcggcgct gcaggaccag
2520 tgcggccacg cgtccatcgga caacgtgacc ggctccaacg cggtaacgt gttccctggc
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2640 gtgcgcactg gcacgctggc cttctccgtc acgttcttca ccgttttcgc cttcggtggc
2700 attggcggtgc tgctgtaccg ggcggggccg cacatggcg gcgagctgg cggccggcgc
2760 ggaccaagc tgcaccac cggcgctttc ctggccctct ggctctgtatcatcccttc
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3120 tatatccctg gggaaatttc cacccatgtc ccctccccag ggaaccaccc ccagtaacca
3180

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 3720
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 3780
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 3960
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 4020
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 4080
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 4140
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 4200
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 4260
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 4291

<210> 2522
 <211> 952
 <212> PRT
 <213> Homo sapiens

<400> 2522
 Leu Ser Leu Phe Arg Ala Glu Ser Pro Thr Thr Ala Ser Pro Ala Leu
 1 5 10 15
 Gly Gly Pro Ala Pro Gly Cys Ser Arg Arg Thr Pro Pro Pro Pro Met
 20 25 30
 Ala Pro Leu Ala Leu Val Gly Val Thr Leu Leu Leu Ala Ala Pro Pro
 35 40 45
 Cys Ser Gly Ala Ala Thr Pro Thr Pro Ser Leu Pro Pro Pro Pro Ala
 50 55 60
 Asn Asp Ser Asp Thr Ser Thr Gly Gly Cys Gln Gly Ser Tyr Arg Cys

65	70	75	80
Gln Pro Gly Val Leu Leu Pro Val Trp		Glu Pro Asp Asp Pro Ser	Leu
85		90	95
Gly Asp Lys Ala Ala Arg Ala Val Val	Tyr Phe Val Ala Met Val Tyr		
100	105		110
Met Phe Leu Gly Val Ser Ile Ile Ala Asp Arg	Phe Met Ala Ala Ile		
115	120		125
Glu Val Ile Thr Ser Lys Glu Lys Glu Ile Thr Ile Thr Lys Ala Asn			
130	135	140	
Gly Glu Thr Ser Val Gly Thr Val Arg Ile Trp Asn Glu Thr Val Ser			
145	150	155	160
Asn Leu Thr Leu Met Ala Leu Gly Ser Ser Ala Pro Glu Ile Leu Leu			
165		170	175
Ser Val Ile Glu Val Cys Gly His Asn Phe Gln Ala Gly Glu Leu Gly			
180	185	190	
Pro Gly Thr Ile Val Gly Ser Ala Ala Phe Asn Met Phe Val Val Ile			
195	200	205	
Ala Val Cys Ile Tyr Val Ile Pro Ala Gly Glu Ser Arg Lys Ile Lys			
210	215	220	
His Leu Arg Val Phe Phe Val Thr Ala Ser Trp Ser Ile Phe Ala Tyr			
225	230	235	240
Val Trp Leu Tyr Leu Ile Leu Ala Val Phe Ser Pro Gly Val Val Gln			
245	250	255	
Val Trp Glu Ala Leu Leu Thr Leu Val Phe Phe Pro Val Cys Val Val			
260	265	270	
Phe Ala Trp Met Ala Asp Lys Arg Leu Leu Phe Tyr Lys Tyr Val Tyr			
275	280	285	
Lys Arg Tyr Arg Thr Asp Pro Arg Ser Gly Ile Ile Ile Gly Ala Glu			
290	295	300	
Gly Asp Pro Pro Lys Ser Ile Glu Leu Asp Gly Thr Phe Val Gly Ala			
305	310	315	320
Glu Ala Pro Gly Glu Leu Gly Gly Leu Gly Pro Gly Pro Ala Glu Ala			
325	330	335	
Arg Glu Leu Asp Ala Ser Arg Arg Glu Val Ile Gln Ile Leu Lys Asp			
340	345	350	
Leu Lys Gln Lys His Pro Asp Lys Asp Leu Glu Gln Leu Val Gly Ile			
355	360	365	
Ala Asn Tyr Tyr Ala Leu Leu His Gln Gln Lys Ser Arg Ala Phe Tyr			
370	375	380	
Arg Ile Gln Ala Thr Arg Leu Met Thr Gly Ala Gly Asn Val Leu Arg			
385	390	395	400
Arg His Ala Ala Asp Ala Ser Arg Arg Ala Ala Pro Ala Glu Gly Ala			
405	410	415	
Gly Glu Asp Glu Asp Asp Gly Ala Ser Arg Ile Phe Phe Glu Pro Ser			
420	425	430	
Leu Tyr His Cys Leu Glu Asn Cys Gly Ser Val Leu Leu Ser Val Thr			
435	440	445	
Cys Gln Gly Gly Glu Gly Asn Ser Thr Phe Tyr Val Asp Tyr Arg Thr			
450	455	460	
Glu Asp Gly Ser Ala Lys Ala Gly Ser Asp Tyr Glu Tyr Ser Glu Gly			
465	470	475	480
Thr Leu Val Phe Lys Pro Gly Glu Thr Gln Lys Glu Leu Arg Ile Gly			
485	490	495	
Ile Ile Asp Asp Asp Ile Phe Glu Asp Glu His Phe Phe Val Arg			

	500	505	510
Leu Leu Asn Leu Arg Val Gly Asp Ala Gln Gly Met Phe Glu Pro Asp			
515	520	525	
Gly Gly Arg Pro Lys Gly Arg Leu Val Ala Pro Leu Leu Ala Thr			
530	535	540	
Val Thr Ile Leu Asp Asp Asp His Ala Gly Ile Phe Ser Phe Gln Asp			
545	550	555	560
Arg Leu Leu His Val Ser Glu Cys Met Gly Thr Val Asp Val Arg Val			
565	570	575	
Val Arg Ser Ser Gly Ala Arg Gly Thr Val Arg Leu Pro Tyr Arg Thr			
580	585	590	
Val Asp Gly Thr Ala Arg Gly Gly Val His Tyr Glu Asp Ala Cys			
595	600	605	
Gly Glu Leu Glu Phe Gly Asp Asp Glu Thr Met Lys Thr Leu Gln Val			
610	615	620	
Lys Ile Val Asp Asp Glu Glu Tyr Glu Lys Lys Asp Asn Phe Phe Ile			
625	630	635	640
Glu Leu Gly Gln Pro Gln Trp Leu Lys Arg Gly Ile Ser Ala Leu Leu			
645	650	655	
Leu Asn Gln Gly Asp Gly Asp Arg Lys Leu Thr Ala Glu Glu Glu			
660	665	670	
Ala Arg Arg Ile Ala Glu Met Gly Lys Pro Val Leu Gly Glu Asn Cys			
675	680	685	
Arg Leu Glu Val Ile Ile Glu Glu Ser Tyr Asp Phe Lys Asn Thr Val			
690	695	700	
Asp Lys Leu Ile Lys Lys Thr Asn Leu Ala Leu Val Ile Gly Thr His			
705	710	715	720
Ser Trp Arg Glu Gln Phe Leu Glu Ala Ile Thr Val Ser Ala Gly Asp			
725	730	735	
Glu Glu Glu Glu Asp Gly Ser Arg Glu Glu Arg Leu Pro Ser Cys			
740	745	750	
Phe Asp Tyr Val Met His Phe Leu Thr Val Phe Trp Lys Val Leu Phe			
755	760	765	
Ala Cys Val Pro Pro Thr Glu Tyr Cys His Gly Trp Ala Cys Phe Gly			
770	775	780	
Val Ser Ile Leu Val Ile Gly Leu Leu Thr Ala Leu Ile Gly Asp Leu			
785	790	795	800
Ala Ser His Phe Gly Cys Thr Val Gly Leu Lys Asp Ser Val Asn Ala			
805	810	815	
Val Val Phe Val Ala Leu Gly Thr Ser Ile Pro Asp Thr Phe Ala Ser			
820	825	830	
Lys Val Ala Ala Leu Gln Asp Gln Cys Ala Asp Ala Ser Ile Gly Asn			
835	840	845	
Val Thr Gly Ser Asn Ala Val Asn Val Phe Leu Gly Leu Gly Val Ala			
850	855	860	
Trp Ser Val Ala Ala Val Tyr Trp Ala Val Gln Gly Arg Pro Phe Glu			
865	870	875	880
Val Arg Thr Gly Thr Leu Ala Phe Ser Val Thr Leu Phe Thr Val Phe			
885	890	895	
Ala Phe Val Gly Ile Ala Val Leu Leu Tyr Arg Arg Arg Pro His Ile			
900	905	910	
Gly Gly Glu Leu Gly Gly Pro Arg Gly Pro Lys Leu Ala Thr Thr Ala			
915	920	925	
Leu Phe Leu Gly Leu Trp Leu Leu Tyr Ile Leu Phe Ala Ser Leu Glu			

930	935	940
Ala	Tyr Cys His Ile Arg Gly Phe	
945	950	

<210> 2523
<211> 392
<212> DNA
<213> Homo sapiens

<400> 2523
nnnattacct acgttcgcac cctgtcagga ttgcctaca ccgcatttgt cgtggatgtc
60
ttcagccgaa aaattgttgg tggtgctaca cgctcgacga tgcgtaccga tgcgtgcc
120
atggaggctt tggagcatgc gttaacgact gcagggcgaa ttcatggaaa ccagttaatt
180
caccatagcg atcggggcag ccagtagctg tcactgaatg attccaccgc gttagcggaa
240
tccggaatcc gtccgagtgt ggaaacagtc ggcgattctt atgacaatgc tctagccgaa
300
acagtcaacg gtctctacaa ggccgaactg attcatgccc aaggtccgtg gacgtcggc
360
ggagaagtgc aattggccac cttgcggnnn nn
392

<210> 2524
<211> 130
<212> PRT
<213> Homo sapiens

<400> 2524
Xaa Ile Thr Tyr Val Arg Thr Leu Ser Gly Phe Ala Tyr Thr Ala Phe
1 5 10 15
Val Val Asp Val Phe Ser Arg Lys Ile Val Gly Val Ala Thr Arg Ser
20 25 30
Thr Met Arg Thr Asp Ala Leu Pro Met Glu Ala Leu Glu His Ala Leu
35 40 45
Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp
50 55 60
Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu
65 70 75 80
Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn
85 90 95
Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His
100 105 110
Ala Gln Gly Pro Trp Thr Ser Val Gly Glu Val Glu Leu Ala Thr Leu
115 120 125
Arg Xaa
130

<210> 2525
<211> 378
<212> DNA
<213> Homo sapiens

<400> 2525
acgcgttctc gggcgagggc atcgcagatt tcgaatgcac ggtgatggcg gtgtgccca
60
tcccccttga atacgtggtg ctgtcacccgc cgccggaaatc aagaaccgca cgttgcgcaa
120
atcgctgcgc tacgcaccaa cgtggtcggc aagatgttgg tcagcggcga gccccgcnaa
180
tgattcatat ctccgatatac agcacgacag gggcgtcatt ccgctctgca catcggttg
240
gaagtcaagcg gtgcgcggc acgcctgcga tttcgggtga agacgcgcga ctaccattca
300
gaactggtgg ccgcaacact cattcgcagc gagaagcccg ccgatttgcc caacacctat
360
caatacggcg tggaaattc
378

<210> 2526
<211> 111
<212> PRT
<213> Homo sapiens

<400> 2526
Met Ala Val Cys Arg Ile Pro Phe Glu Tyr Val Val Leu Ser Pro Pro
1 5 10 15
Arg Glu Ser Arg Thr Ala Arg Cys Ala Asn Arg Cys Ala Thr His Gln
20 25 30
Arg Gly Arg Gln Asp Val Gly Gln Arg Arg Ala Pro Xaa Met Ile His
35 40 45
Ile Ser Asp Ile Ser Thr Thr Gly Ala Ser Phe Arg Ser Ala His Arg
50 55 60
Leu Gly Ser Gln Arg Cys Ala Arg Thr Pro Ala Ile Ser Gly Glu Asp
65 70 75 80
Ala Arg Leu Pro Phe Arg Thr Gly Gly Arg Asn Thr His Ser Gln Arg
85 90 95
Glu Ala Arg Arg Phe Ala Gln His Leu Ser Ile Arg Arg Gly Ile
100 105 110

<210> 2527
<211> 305
<212> DNA
<213> Homo sapiens

<400> 2527
ntggtcacct tccgaatggg acggcgcccc aaacccgaga tcatggccag caaagagcag
60
cagatccaga gagacgacct tggagccagt ccccagagca gcagccagcc agaccacggc
120
cgcctctccc ccccagaagc tcccgacagg cccaccatct ccacggcctc cgagacctca
180
gtgtacgtga cctggattcc ccgtggaaat ggtgggttcc caatccagtc cttccgtgtg
240
gagtacaaga agctaaagaa agtggggagac tggattctgg ccaccagcgc catccccca
300

cgcgt
305

<210> 2528
<211> 101
<212> PRT
<213> Homo sapiens

<400> 2528
Xaa Val Thr Phe Arg Met Gly Arg Arg Pro Lys Pro Glu Ile Met Ala
1 5 10 15
Ser Lys Glu Gln Gln Ile Gln Arg Asp Asp Leu Gly Ala Ser Pro Gln
20 25 30
Ser Ser Ser Gln Pro Asp His Gly Arg Leu Ser Pro Pro Glu Ala Pro
35 40 45
Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr
50 55 60
Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val
65 70 75 80
Glu Tyr Lys Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser
85 90 95
Ala Ile Pro Pro Arg
100

<210> 2529
<211> 387
<212> DNA
<213> Homo sapiens

<400> 2529
acgcgtctcc ccgtggtggg tccccatccc cggccggct ctgccactga agcctctccc
60
tgtgtcctcc gtgcggcccg agtggcctgc tagcccgctc tcccacacag tctccttgat
120
gtgaagtgtc acccggttg ctgcggcgtg tctccggcgt aacacgtgta taccggctca
180
gccccatggcg cggtcgctgg gaaggctcct gcgtatggct ttgccatccg ggacccgggc
240
tttgcgttcg agggttgggc ttctgagcag aggaaggcca gaggttaacca ggtccatgca
300
cgtttgtgtc ttccacaat gtcgggcttt tatggatgct ttttagtctca gtcacaaaag
360
ccatgagctc cacaggttcc tgaggaa
387

<210> 2530
<211> 121
<212> PRT
<213> Homo sapiens

<400> 2530
Met Ala Phe Val Thr Glu Thr Lys Ser Ile His Lys Ser Pro Thr Leu
1 5 10 15
Trp Lys Asp Thr Asn Val His Gly Pro Gly Tyr Leu Trp Pro Ser Ser

20	25	30
Ala Gln Lys Pro Thr Pro Ala Glu Gln Ser Pro Gly Pro Gly Trp Gln		
35	40	45
Ser His Thr Gln Glu Pro Ser Gln Gln Pro Pro Pro Trp Leu Ser Arg		
50	55	60
Tyr Thr Arg Val Thr Ala Glu Thr Arg Arg Ser Lys Pro Gly Asp Thr		
65	70	75
Ser His Gln Gly Asp Cys Val Gly Glu Arg Ala Ser Arg Pro Leu Gly		
85	90	95
Gly His Gly Gly His Arg Glu Arg Leu Gln Trp Gln Ser Arg Pro Gly		
100	105	110
Asp Arg Asp Pro Pro Arg Gly Asp Ala		
115	120	

<210> 2531

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2531

tctagagata caaaaagtac tctatacact gagagacatc tggataaata caaagggtga
60
gctttccaac cagctgaaga tgacaagact aaaccccaag tcgctgcagc tctgtgtcat
120
ctcatcagca gccctggaga tgacaaagat agtgctgagg gggAACAGAC cttcgtcattc
180
agttaaagat atgcttagctt ttcttttct tccagacatt cctgaatcca gagaacttcc
240
ctgtaatgcg tcaaattcatt taggtctcaa ttctttccct agagagacaa ggagcacagt
300
tcgttcccaa ggccccccat gcttggcgag ggcgtctctg ctttccaggc agggcctgc
360
tgcctccacc cacgtgcagg gaaaggaagg acgcgt
396

<210> 2532

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2532

1	5	10	15
Met Thr Arg Leu Asn Pro Lys Ser Leu Gln Leu Cys Val Ile Ser Ser			
20	25	30	
Ala Ala Leu Glu Met Thr Lys Ile Val Leu Arg Gly Asn Arg Pro Ser			
35	40	45	
Ser Ser Val Lys Asp Met Leu Ala Phe Leu Phe Leu Pro Asp Ile Pro			
50	55	60	
Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn			
65	70	75	80
Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro			
Cys Leu Ala Arg Ala Ser Leu Leu Ser Arg Gln Gly Pro Ala Ala Ser			
85	90	95	
Thr His Val Gln Gly Lys Glu Gly Arg			

100

105

<210> 2533
<211> 495
<212> DNA
<213> Homo sapiens

<400> 2533
ngccggccag atgtccccggg cgtgctggtg gccggggct gtgcaggagt cctggcctgg
60
gctgtggcan ccccatgga cgtgatcaag tcgagactgc aggcagacgg gcagggccag
120
aggcgctacc ggggtctcct gcactgtatg gtgaccagcg ttcgagagga gggaccccg
180
gtcctttca aggggctggt actcaattgc tgccgcgcct tccctgtcaa catggtggtc
240
ttcgtcgccat atgaggcagt gctgaggcgc cccggggtc tgctcacata gccggcccc
300
acgcccagcg gcccacccac cagcagctgc tggaggtcgt agtggctgga ggaggcaagg
360
ggtagtgtgg ctgggttcgg gacccacag ggcattgcc caggagaatg aggagcctcc
420
ctgcagtgtt gtcggccgag gcctgagetc gcctgccc auctactgacc tcaggtcgag
480
ggggccgcca gccat
495

<210> 2534
<211> 96
<212> PRT
<213> Homo sapiens

<400> 2534
Xaa Arg Pro Asp Val Pro Gly Val Leu Val Ala Gly Gly Cys Ala Gly
1 5 10 15
Val Leu Ala Trp Ala Val Ala Xaa Pro Met Asp Val Ile Lys Ser Arg
20 25 30
Leu Gln Ala Asp Gly Gln Gly Gln Arg Arg Tyr Arg Gly Leu Leu His
35 40 45
Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys
50 55 60
Gly Leu Val Leu Asn Cys Cys Arg Ala Phe Pro Val Asn Met Val Val
65 70 75 80
Phe Val Ala Tyr Glu Ala Val Leu Arg Leu Ala Arg Gly Leu Leu Thr
85 90 95

<210> 2535
<211> 1904
<212> DNA
<213> Homo sapiens

<400> 2535
ncggcccccggg aacgtggctg gttggaggag gtagatcacc ctttctgcgg gggacgattt
60

cgtcgggtggt aggctgctac catgagggttg aatcagaaca ctttgctgct ggggaagaag
120
gtggtccttg taccctacac ctcggagcat gtgcccgca ggtaccacga gtggatgaaa
180
tcagaggagc tgacgcgttt gacagcctcg gagccgctga ccctggagca ggagtatgcc
240
atgcagtgcgca gctggcagga agatgcagac aagtgtacct tcattgtgct ggatgccgag
300
aagtggcagg cccagccagg cgccacccaa gagagctgca tgggtggaga cgtgaacctc
360
ttcctcacag atctagaaga ccccaccccttg ggggagatcg aggtcatgtat tgcagagccc
420
agctgcaggg gtaagggcct tggcactgag gccgttctcg cgatgctgct ttacggagtg
480
accacgctag gtctgaccaa gtttgaggct aaaattgggc aaggaaatga accaagcata
540
cgatgttcc agaaacttca ctttgagcag gtggctacga gcagtgttt tcaggaggtg
600
accctcagac tgacagttag tgagtccgag catcagtggc ttctggagca gaccagccac
660
gtgaaagaga agccttacag agatgggtcg gcagagccct gctgatggct gggccttgg
720
ggcagccact ctgtgtgagc agggtgttgg gcccatacac ttcaaagacc agagccctgc
780
actgggagag tgctcctggc ccaggctggg aatcacctt cgaggccctt cagactctgg
840
cggggcttgc tgtggctcc ctccagctag tgggtggct gagcagactc cagggccagg
900
gccagttccc ttctccctc cggccaaac ccagacccag actctaggaa gctggaatgg
960
agggcaggga tccatggag atgtcggttggat gaagggtggga gctggaggtg cagggggacc
1020
tggAACATGG atgggagtgg acaggccctt ctccttagag gccagaggtg ctggcctggc
1080
tgggagtgaa gctccaggca ctaccagctt tcctgatTTT cccgtttgggt ccatgtgaag
1140
agctaccacg agccccagcc tcacagtgtc cactcaaggg cagcttggtc ctctgtcct
1200
gcagaggcag gctgggtgtga ccctgggaac ttgaccgggg aacaacaggt ggtccagagt
1260
gagtgtggcc tggccctca acctagtgtc cgtcctccctc tctcctggag ccagtcttga
1320
gtttaaaggc attagtgtta gatacagctc cttgtggctg gaaaacaccc ctctgctgat
1380
aaagctcagg gggcactgag gaagcagagg ccccttgggg gtgcctccct gaagagagcg
1440
tcaggccatc agctctgtcc ctctgggtgt cccacgtctg ttccatcaccc tccatctctg
1500
ggagcagctg cacctgactg gccacgcggg ggcagtggag gcacaggctc agggtggccg
1560
ggctacctgg caccctatgg cttacaaagt agagttggcc cagtttccctt ccacctgagg
1620
ggagcactct gactcctaac agtcttcctt gccctgccat catctgggtt ggctggctgt
1680

caagaaaaggc cgggcatgct ttctaaacac agccacagga ggctttagg gcatttcca
 1740
 ggtggggaaa cagtctttaga taagtaaggt gacttgccca aggcccccgc accccttga
 1800
 tcttggagtc tcacagcaga ctgcatgtga acaactggaa ccgaaaacat gcctcagtat
 1860
 aaaacaaca ttataaaacg aaaaaaaaaa aaaaaaaaaaag tact
 1904

<210> 2536
 <211> 207
 <212> PRT
 <213> Homo sapiens

<400> 2536
 Met Arg Leu Asn Gln Asn Thr Leu Leu Leu Gly Lys Lys Val Val Leu
 1 5 10 15
 Val Pro Tyr Thr Ser Glu His Val Pro Ser Arg Tyr His Glu Trp Met
 20 25 30
 Lys Ser Glu Glu Leu Gln Arg Leu Thr Ala Ser Glu Pro Leu Thr Leu
 35 40 45
 Glu Gln Glu Tyr Ala Met Gln Cys Ser Trp Gln Glu Asp Ala Asp Lys
 50 55 60
 Cys Thr Phe Ile Val Leu Asp Ala Glu Lys Trp Gln Ala Gln Pro Gly
 65 70 75 80
 Ala Thr Glu Glu Ser Cys Met Val Gly Asp Val Asn Leu Phe Leu Thr
 85 90 95
 Asp Leu Glu Asp Pro Thr Leu Gly Glu Ile Glu Val Met Ile Ala Glu
 100 105 110
 Pro Ser Cys Arg Gly Lys Gly Leu Gly Thr Glu Ala Val Leu Ala Met
 115 120 125
 Leu Ser Tyr Gly Val Thr Leu Gly Leu Thr Lys Phe Glu Ala Lys
 130 135 140
 Ile Gly Gln Gly Asn Glu Pro Ser Ile Arg Met Phe Gln Lys Leu His
 145 150 155 160
 Phe Glu Gln Val Ala Thr Ser Ser Val Phe Gln Glu Val Thr Leu Arg
 165 170 175
 Leu Thr Val Ser Glu Ser Glu His Gln Trp Leu Leu Glu Gln Thr Ser
 180 185 190
 His Val Glu Glu Lys Pro Tyr Arg Asp Gly Ser Ala Glu Pro Cys
 195 200 205

<210> 2537
 <211> 509
 <212> DNA
 <213> Homo sapiens

<400> 2537
 acgcgttctc gtaaggacaa gcttgacgcc gaggtgcatt ccggtaaagg cacccccggg
 60
 gatgtcatcg tgctgcggtt ttccggagcc atggcgaagc gtcctgcctc agttatcctt
 120
 ccgctgtacac tgcggactc ccccgatcatt gcgtggtgcc cttctccgg ccctgacaac
 180

ctcgcctcg accccatcg agcccttgcg gaccggcga tcaccgactc ggcagctgac
 240
 aaagatccgt gcaaaggccct catacgccgt gcggctcacc taaccgaggg tgactccgac
 300
 ctgtgttggg ctcgcaccac cagctggaga gccctagctg cagcagctt ggatcaacat
 360
 ccagcgaccg tcaagttcgc tcgggttagag tcagccgccg gtaatgcgcc ggcgatgctg
 420
 ctggcagccct ggctaggatt gcgtctcggc gtcccggtcg agcgggtgac aaccgacgctg
 480
 cccggcatct ccgcgatcgt catgtcgac
 509

<210> 2538
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 2538
 Thr Arg Ser Arg Lys Asp Lys Leu Asp Ala Glu Val His Ala Gly Glu
 1 5 10 15
 Gly Thr Pro Gly Asp Val Ile Val Leu Arg Phe Ser Gly Ala Met Ala
 20 25 30
 Lys Arg Pro Ala Ser Val Ile Leu Pro Leu Leu Ser Asp Ser Pro
 35 40 45
 Val Ile Ala Trp Trp Pro Phe Ser Gly Pro Asp Asn Leu Ala Ser Asp
 50 55 60
 Pro Ile Gly Ala Leu Ala Asp Arg Arg Ile Thr Asp Ser Ala Ala Asp
 65 70 75 80
 Lys Asp Pro Cys Lys Ala Leu Ile Arg Arg Ala Ala His Leu Thr Glu
 85 90 95
 Gly Asp Ser Asp Leu Cys Trp Ala Arg Thr Thr Ser Trp Arg Ala Leu
 100 105 110
 Ala Ala Ala Leu Asp Gln His Pro Ala Thr Val Lys Phe Ala Arg
 115 120 125
 Val Glu Ser Ala Ala Gly Asn Ala Pro Ala Met Leu Leu Ala Ala Trp
 130 135 140
 Leu Gly Leu Arg Leu Gly Val Pro Val Glu Arg Val Thr Thr Asp Ala
 145 150 155 160
 Pro Gly Ile Ser Ala Ile Val Met Ser
 165

<210> 2539
 <211> 453
 <212> DNA
 <213> Homo sapiens

<400> 2539
 aagtttctac tgccgcgagc acgtcggtcca ccgtcgaggt catggttcta gtttgcgcg
 60
 tcgcggcatg acccgaggat agtgacgtgg gacaatggct acgtgcgttt tctcaacgag
 120
 cagccgaact acgacctgac gtatgacgac gtcttcatgg caccaaaccg ttcctcggtg
 180

gggtcccgca tgaacgtcga cctcacgtca acagacgggc taggcactcc tctgccccctc
 240
 gtagtggcca atatgaccgc aatttccgga cgtcgcatgg cagagaccat cgccaggcgc
 300
 ggaggcattg ctgttctgcc ccaagatatc ccggcggatt tcgtcgcccc gtccattcgg
 360
 cgcgtcaaag atgcgcatac tcgattcgac accccagtca csgtcaaccc gacaacgact
 420
 gtcggtgagg ccatgaacctt gctcaacaag cgc
 453

<210> 2540

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2540

Phe	Ala	Ala	Ser	Arg	His	Asp	Pro	Arg	Ile	Val	Thr	Trp	Asp	Asn	Gly
1									5		10			15	
Tyr	Val	Arg	Phe	Leu	Asn	Glu	Gln	Pro	Asn	Tyr	Asp	Leu	Thr	Tyr	Asp
									20		25			30	
Asp	Val	Phe	Met	Ala	Pro	Asn	Arg	Ser	Ser	Val	Gly	Ser	Arg	Met	Asn
								35		40			45		
Val	Asp	Leu	Thr	Ser	Thr	Asp	Gly	Leu	Gly	Thr	Pro	Leu	Pro	Leu	Val
								50		55			60		
Val	Ala	Asn	Met	Thr	Ala	Ile	Ser	Gly	Arg	Arg	Met	Ala	Glu	Thr	Ile
								65		70			75		80
Ala	Arg	Arg	Gly	Gly	Ile	Ala	Val	Leu	Pro	Gln	Asp	Ile	Pro	Ala	Asp
								85		90			95		
Phe	Val	Ala	Arg	Ser	Ile	Arg	Arg	Val	Lys	Asp	Ala	His	Thr	Arg	Phe
								100		105			110		
Asp	Thr	Pro	Val	Thr	Val	Asn	Pro	Thr	Thr	Thr	Val	Gly	Glu	Ala	Met
								115		120			125		
Asn	Leu	Leu	Asn	Lys	Arg										
								130							

<210> 2541

<211> 564

<212> DNA

<213> Homo sapiens

<400> 2541

accggctcaccggagttc tgtttcctca ggtactgcac tgtatacaac tctaaatgca
 60
 ccctgcattgg aaccattgc agggcacacg cagtcatacat gtatcccagg ttttatgctc
 120
 acagaggctg caatactccg tgtctggaat acgttatttg ctgcacaccc cccagaggaa
 180
 catgtaacgt ctgtgtaca tgctatcctg cacacatctg aaagaatctg tgtacacaac
 240
 actattatgc tgtgcacaca ttccctata ttctgtgtag agagcaccc attttgtact
 300
 caaatattcg gcttccataa caagttacat tgctcacatc ttaaaaatatt cattacacgt
 360

gaaaccacccg catggtaccc acatccttctt ggaatgtccc qcacagaggc tgatatatgt
 420
 gcacagttctt cactgttctg cgtccccagc ccctcacact ggacccacac ctcacactct
 480
 tctccaagg gagactttgg ttctccctt ccctgtgctg gctgtgcggg ccacagtcct
 540
 ctgcacgcca gcagcatgac gcgt
 564

<210> 2542
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2542
 Met Leu Cys Thr His Phe Leu Ile Phe Cys Val Glu Ser Thr Ser Phe
 1 5 10 15
 Cys Thr Gln Ile Phe Gly Phe His Asn Lys Leu His Cys Ser His Leu
 20 25 30
 Lys Ile Phe Ile Thr Arg Glu Thr Thr Ala Trp Tyr Arg His Pro Ser
 35 40 45
 Gly Met Ser Arg Thr Glu Ala Asp Ile Cys Ala Gln Phe Ser Leu Phe
 50 55 60
 Cys Val Pro Ser Pro Ser His Trp Thr Pro Thr Ser His Ser Ser Ala
 65 70 75 80
 Lys Gly Asp Phe Gly Ser Pro Leu Pro Cys Ala Gly Cys Ala Gly His
 85 90 95
 Ser Pro Leu His Ala Ser Ser Met Thr Arg
 100 105

<210> 2543
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2543
 cgcctgaagg gggcgaaaa aatggaatgg gggggaaaggcg cgccgggtggg gacatgctgg
 60
 aacgtgccccca tgctttctgc accacactgg atgactgaag gggaaagggaaac gagcgtctta
 120
 ccgcctcctga tgagattttt gttttgcct aacaaagaaa tgtgtatgaa tgcacgtctg
 180
 tttgcaggggg cagggaggag gagggtcctt ggaatagctg ccgacaacag ctggaaactcc
 240
 tgtctgggtc ccccaagctgg gctagagagg gcagtatca tctgtccact ggacagggaaag
 300
 gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gccctgtcc
 360
 aatggggcccc agcaggcagc agtgctg
 387

<210> 2544
 <211> 122
 <212> PRT

<213> Homo sapiens

<400> 2544

Met	Glu	Trp	Gly	Gly	Arg	Ala	Arg	Val	Gly	Thr	Cys	Trp	Asn	Val	Pro
1									10						15
Met	Leu	Ser	Ala	Pro	His	Trp	Met	Thr	Glu	Gly	Glu	Gly	Thr	Ser	Val
								20	25					30	
Leu	Pro	Leu	Leu	Met	Arg	Phe	Leu	Phe	Leu	Pro	Asn	Lys	Glu	Met	Cys
								35	40					45	
Met	Asn	Ala	Arg	Leu	Phe	Ala	Gly	Ala	Gly	Arg	Arg	Val	Leu	Gly	
								50	55					60	
Ile	Ala	Ala	Asp	Asn	Ser	Trp	Asn	Ser	Cys	Leu	Gly	Pro	Pro	Ala	Gly
65								70		75				80	
Leu	Glu	Arg	Ala	Val	Ile	Ile	Cys	Pro	Leu	Asp	Arg	Lys	Val	Cys	Lys
								85		90				95	
Gly	Leu	Phe	Ala	Tyr	Trp	Val	Pro	Ile	Phe	Ser	Leu	Leu	Lys	Pro	Leu
								100		105				110	
Ser	Asn	Gly	Ala	Gln	Gln	Ala	Ala	Val	Leu						
								115		120					

<210> 2545

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2545

gcgattattt	tcgtgctgcc	cgga	cattatc	atgg	tggct	ggc	tttcccgtac
60							
tggaccaccc	tcgctatctg	tctag	tccgc	ggc	atcctcg	gcgttatgta	ctcgattccg
120							
ctgcgtcggg	ccctcgtgac	agg	tcggat	cttcc	tacc	cgagg	cgca
180							
gaggtgctca	aagt	aggcga	ttccgctgg	gcc	ccgagg	ctaaca	agggtctgcga
240							
gtcatcatcg	tcgg	ttctgt	ggtctctgca	gcgtac	cccc	tgttgcgga	tcttaagctt
300							
gtgaagt	cgctgaccaa	gc	cttcaag	acgg	gc		
336							

<210> 2546

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

Ala	Ile	Ile	Phe	Val	Leu	Pro	Gly	Leu	Ile	Met	Val	Gly	Trp	Trp	Ser
1									10					15	
Gly	Phe	Pro	Tyr	Trp	Thr	Thr	Leu	Ala	Ile	Cys	Leu	Val	Gly	Gly	Ile
									20	25				30	
Leu	Gly	Val	Met	Tyr	Ser	Ile	Pro	Leu	Arg	Arg	Ala	Leu	Val	Thr	Gly
									35	40				45	
Ser	Asp	Leu	Pro	Tyr	Pro	Glu	Gly	Val	Ala	Gly	Ala	Glu	Val	Leu	Lys
									50	55				60	
Val	Gly	Asp	Ser	Ala	Gly	Ala	Ala	Glu	Ala	Asn	Lys	Val	Gly	Leu	Arg

65	70	75	80
Val Ile Ile Val Gly Ser Val Val Ser Ala Ala Tyr Ala Leu Leu Ser			
85	90	95	
Asp Leu Lys Leu Val Lys Ser Ala Leu Thr Lys Pro Phe Lys Thr Gly			
100	105	110	

<210> 2547

<211> 556

<212> DNA

<213> Homo sapiens

<400> 2547

acgcgtgcac acacacacac gcaggcgtac acgctcacaa gtgcacacac acatatgagt
60ttcccacaca tctcaccata tcacttctc ttactttt aaagacaggg cacttgccct
120tatggccaat aatattatgc ccaagctaca acattccgag tcaatcacaa aggttataaa
180cttcatttga actgaagacc acctgtaagc acgcagctca aatgttctca cctagaaaatt
240caagttgtgt ttggaaagtg gacttaacgg tcaaagaaaa aggctggcc aacttcagag
300agggacaccc agccctgcta cgttcggtgt cattatgtgg tgctgtgcta tccatagaga
360aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt
420catcaccaca atatgaaggc ctccttgta taaatgactt ttttaggtcc caataagaaa
480taccatctat tctatctgga attattttat tagttcaaa ttttattctta agattcatac
540

tatcagatca tctaga

556

<210> 2548

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2548

Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
1 5 10 15Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Ser Phe Ile Pro Arg
20 25 30Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
35 40 45Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
50 55 60Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
65 70 75 80Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
85 90 95Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
100 105

<210> 2549
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 2549
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 60
 atcgatgata atggtgtcgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt
 120
 gctaaatcgg gcacaccttc tttcttagag caattgagtg gcgatcagaa aaaagacagc
 180
 caacttattt gtcaattcgg tgtaggctt tactctgctt tcatacggtgc tgataaagta
 240
 acagtagaaa cacgtcgccg aggtgcgacg gaaaatgaag cggttcgctg ggtatctgat
 300
 ggttctggtg aatttactat tgagacgatc gataaagcga ctctgggtac acgcattact
 360
 ttgcacatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcatttagta
 420
 acaaaaatatt ctgat
 435

<210> 2550
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 2550
 Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala
 1 5 10 15
 Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu
 20 25 30
 Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe
 35 40 45
 Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly
 50 55 60
 Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val
 65 70 75 80
 Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg
 85 90 95
 Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys
 100 105 110
 Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys
 115 120 125
 Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser
 130 135 140
 Asp
 145

<210> 2551
 <211> 403
 <212> DNA
 <213> Homo sapiens

<400> 2551
nngccggcca gcctcacatc agtctctccg cccccgggaa ggctcagcac tttaaatcga
60
ggactccact tctggggacg cctgggtcgt tcgccccacca ggcctaggct acgctccatg
120
ctccccccagc aatctctgtc tacaccccttgc gggcgccctt gccctctcc gaccctttc
180
cagccannaa gtccccccac cccttcagag aagcagccctc aaattccaga agtgaggct
240
ccagcctccc cgcgaggtac cagccccaca gtcttctggg agccattgtg gccagggacg
300
360
gcctctggac tgccaggctg ggttgggac cagggAACAT cggtctactc aggtgtgagg
ggcagggtct ggcctgcccc aaagttggct ccatcctgga can
403

<210> 2552
<211> 134
<212> PRT
<213> Homo sapiens

<400> 2552
Xaa Pro Ala Ser Leu Thr Ser Val Ser Pro Pro Arg Gly Arg Leu Ser
1 5 10 15
Thr Leu Asn Arg Gly Leu His Phe Trp Gly Arg Leu Val Arg Ser Pro
20 25 30
Thr Arg Pro Arg Leu Arg Ser Met Leu Pro Gln Gln Ser Leu Ser Thr
35 40 45
Pro Pro Ala Ala Pro Cys Pro Pro Pro Thr Pro Phe Gln Pro Xaa Ser
50 55 60
Pro Pro Thr Pro Ser Glu Lys Gln Pro Gln Ile Pro Glu Val Glu Ala
65 70 75 80
Pro Ala Ser Pro Arg Gly Thr Ser Pro Thr Val Phe Trp Glu Pro Leu
85 90 95
Trp Pro Gly Thr Ala Ser Gly Leu Pro Gly Trp Val Gly Asp Gln Gly
100 105 110
Thr Ser Val Tyr Ser Gly Val Arg Gly Gln Val Trp Pro Ala Pro Lys
115 120 125
Leu Ala Pro Ser Trp Thr
130

<210> 2553
<211> 380
<212> DNA
<213> Homo sapiens

<400> 2553
actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg
60
gagagataca gcatgggcca aggagcactg ggagccagca gcagctggaa gaggcaggag
120
gcatcctccc tagaccgcac aggatgctac tgggtgagcc tgctgtcctg gaaaaggcgt
180

gaagtctgcc tgagtgggca ggggcttctg cgccgcaccc agcaaggcca aggttggagg
240
gaccctcctg gcccctgtcc tggctccacc ctcagctgct ggcaggtggg tcaccaggcc
300
tctccccaaa gaaactcctg caggcagctc tggacccct gtcttacaca ccttctcact
360
gaggctgcc a gcatccccagn
380

<210> 2554
<211> 111
<212> PRT
<213> Homo sapiens

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<400> 2554
Met Lys Gln Arg Leu Glu Arg Tyr Ser Met Gly Gln Gly Ala Leu Gly
      1           5           10          15
Ala Ser Ser Ser Trp Lys Arg Gln Glu Ala Ser Ser Leu Asp Arg Thr
      20          25          30
Gly Cys Tyr Trp Val Ser Leu Leu Ser Trp Lys Arg Arg Glu Val Cys
      35          40          45
Leu Ser Gly Gln Gly Leu Leu Arg Ser Thr Gln Gln Gly Gln Gly Gly
      50          55          60
Arg Asp Pro Pro Gly Pro Cys Pro Gly Ser Thr Leu Ser Cys Trp Gln
      65          70          75          80
Val Gly His Gln Ala Ser Ala Gln Arg Asn Ser Cys Arg Gln Leu Trp
      85          90          95
Thr Pro Cys Leu Thr His Leu Leu Thr Glu Pro Ala Ser Ile Pro
      100         105         110

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<210> 2555  
<211> 368  
<212> DNA  
<213> Homo sapiens
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<400> 2555
ntccggatgg aaaagtaaaag accagcaata gccaataacg ccattaacac ataccat
60
atgttgttaa tgctgccccgg tagttcggtg gcattttca tgggcaatag tttaatggga
120
gataacgcga ataatggtag tgtcgttcta gtgctcacag acctggtcac ccaaataaaaa
180
ggatttatat cctcccatat cctcattttt gtgctcggtt gccteggcat tgtcttacc
240
gttgccactc gaggtgtaca gttccgcctc ttcgggcaca tgtggcacct catgctcgat
300
tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggtctcgat
360
cacgcgg
368

<210> 2556
<211> 102
<212> PRT

<213> Homo sapiens

<400> 2556

Met	Leu	Leu	Met	Leu	Pro	Gly	Ser	Ser	Val	Ala	Phe	Phe	Met	Gly	Asn			
1																		
														10	15			
Ser	Leu	Met	Gly	Asp	Asn	Ala	Asn	Asn	Gly	Ser	Val	Val	Leu	Val	Leu			
														20	25	30		
Thr	Asp	Leu	Val	Thr	Gln	Ile	Glu	Gly	Phe	Ile	Ser	Ser	His	Ile	Leu			
															35	40	45	
Ile	Phe	Val	Leu	Val	Gly	Leu	Gly	Ile	Val	Phe	Thr	Val	Ala	Thr	Arg			
															50	55	60	
Gly	Val	Gln	Phe	Arg	Leu	Phe	Gly	His	Met	Trp	His	Leu	Met	Leu	Asp			
															65	70	75	80
Ser	Arg	Lys	Gln	Lys	Gly	Thr	Ser	Leu	Ser	Ser	Ser	Gln	Ala	Phe	Thr			
															85	90	95	
Val	Gly	Leu	Asp	His	Ala													
															100			

<210> 2557

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2557

atcactactc	cagttggta	ggcagttctg	ggtcgcacatct	taaatgtgat	cggtgagccg
60					
attgatgaga	tgggcccagt	taacgcgaaa	aaaaaatggg	aaattcacccg	tccagctcct
120					
aaattcgaag	accaagctgt	taaagctgag	atgttcatgt	ctggattttaa	ggtcgttgat
180					
cttcttcac	cttacgcaaa	gggtggcaag	atcggtctct	tccgtggtgc	gggcgttaggt
240					
aaaacagttt	tgattcaaga	gttgattcgt	aacatcgcta	ctgagcacgg	tggatactct
300					
gtattcgcag	gtgtcggcga	gcgtactcgc	gaaggttaacg	atctttgggt	tgagatgaaa
360					
gaatcaggcg	ttatcgcaaa	gaccgcactt	gtattcggtc	agatgaat	
408					

<210> 2558

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2558

Ile	Thr	Thr	Pro	Val	Gly	Glu	Ala	Val	Ley	Gly	Arg	Ile	Leu	Asn	Val		
1																15	
Ile	Gly	Glu	Pro	Ile	Asp	Glu	Met	Gly	Pro	Val	Asn	Ala	Lys	Glu	Lys		
															20	25	30
Trp	Glu	Ile	His	Arg	Pro	Ala	Pro	Lys	Phe	Glu	Asp	Gln	Ala	Val	Lys		
															35	40	45
Ala	Glu	Met	Leu	Met	Thr	Gly	Ile	Lys	Val	Val	Asp	Leu	Leu	Ala	Pro		
															50	55	60
Tyr	Ala	Lys	Gly	Gly	Lys	Ile	Gly	Leu	Phe	Gly	Gly	Ala	Gly	Val	Gly		

65	70	75	80
Lys Thr Val Leu Ile Gln Glu Leu Ile Arg Asn Ile Ala Thr Glu His			
	85	90	95
Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly			
	100	105	110
Asn Asp Leu Trp Val Glu Met Lys Glu Ser Gly Val Ile Ala Lys Thr			
	115	120	125
Ala Leu Val Phe Gly Gln Met Asn			
	130	135	

<210> 2559

<211> 389

<212> DNA

<213> Homo sapiens

<400> 2559

tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
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gctttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcattctcg aagttatgaa tttgcgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aaggttgact gccactctga agattgcctc gcagacaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttcttagagat gacctcattt ccaagttgggt tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

<210> 2560

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2560

<210> 2561
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 2561
 nnactcacca ctgtggttct actatgcctt ctgaccccgtaactggacttc aactggaga
 60
 atgtggagcc atttgaacag gtcctcttc tggagcatat ttcttctgt cacttgtaga
 120
 aaagctgtat tggattgtga ggcaatgaaa acaaataaat tcccttctcc atgtttggac
 180
 tcaaagacta aggtggttat gaagggtcaa aatgtatcta tgaaaaatcc ccataagaac
 240
 aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aaccaggat
 300
 gaaaaagggtg aacctgcgat ttttaaccta agcatcacag aagcccatga atcaggcccc
 360
 tacaaatgca aagcccaagt taccagctgt tcaaaataca gtcgtgactt cagcttcacg
 420
 attgtcgac
 429

<210> 2562
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2562
 Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr
 1 5 10 15
 Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser
 20 25 30
 Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala
 35 40 45
 Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys
 50 55 60
 Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn
 65 70 75 80
 Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu
 85 90 95
 Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile
 100 105 110
 Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr
 115 120 125
 Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp
 130 135 140

<210> 2563
 <211> 267
 <212> DNA
 <213> Homo sapiens

<400> 2563
ggatcccaga cgagtgctgg cagcagtatg ggggccgtgg gggcgacggc caccgtcagc
60
accccggtca ccatccagaa catgacacctc tcttatgtca ccatcacatc ccatgtcctt
120
aaggcctta ccctttggga acaggcagag gccctcacaa ggaagaacaa agaattctt
180
gctcagctca gcacaaaagt gcgctgttg gccctcaaca gcagcctggc ggacctggc
240
caactacacaa ggcagggcct ccagcgg
267

<210> 2564
<211> 89
<212> PRT
<213> Homo sapiens

<400> 2564
Gly Ser Gln Thr Ser Ala Gly Ser Ser Met Gly Ala Val Gly Ala Thr
1 5 10 15
Ala Thr Val Ser Thr Pro Val Thr Ile Gln Asn Met Thr Ser Ser Tyr
20 25 30
Val Thr Ile Thr Ser His Val Leu Lys Ala Phe Thr Leu Trp Glu Gln
35 40 45
Ala Glu Ala Leu Thr Arg Lys Asn Lys Glu Phe Phe Ala Gln Leu Ser
50 55 60
Thr Lys Val Arg Val Leu Ala Leu Asn Ser Ser Leu Val Asp Leu Val
65 70 75 80
His Tyr Thr Arg Gln Gly Leu Gln Arg
85

<210> 2565
<211> 333
<212> DNA
<213> Homo sapiens

<400> 2565
cttcgcactg ctccgcgagt tcttggggga gtgagcacag cgcgttaagct cagccacgtg
60
tggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc caccggat
120
ggcccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc
180
gacatcgccc agttgcagca actcggtgtc tccgatgtgg tcgatctgcg ttccacctat
240
gaggtggcca gcgaggcccc ggggccgtg accgggcgtg gggtgaccat ccaccccat
300
tccttcctgc ccgaccagca cgccaatgtg cac
333

<210> 2566
<211> 111
<212> PRT

<213> Homo sapiens

<400> 2566

Leu	Arg	Thr	Ala	Pro	Arg	Val	Leu	Gly	Gly	Val	Ser	Thr	Ala	Arg	Lys
1							5			10				15	
Leu	Ser	His	Val	Trp	Phe	Glu	Phe	Asp	Ser	Leu	Val	Asn	Ala	Arg	Asp
							20			25			30		
Val	Gly	Gly	Ile	Pro	Thr	Pro	Asp	Gly	Pro	Val	Lys	Ser	Gln	Arg	Leu
							35			40			45		
Ile	Arg	Ser	Asp	Asn	Leu	Gln	Ala	Leu	Thr	Glu	Ala	Asp	Ile	Ala	Gln
							50			55			60		
Leu	Gln	Gln	Leu	Gly	Val	Ser	Asp	Val	Val	Asp	Leu	Arg	Ser	Thr	Tyr
							65			70			75		80
Glu	Val	Ala	Ser	Glu	Gly	Pro	Gly	Pro	Leu	Thr	Gly	Arg	Gly	Val	Thr
							85			90			95		
Ile	His	Pro	His	Ser	Phe	Leu	Pro	Asp	Gln	His	Ala	Asn	Val	His	
							100			105			110		

<210> 2567

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2567

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agccagttca	cagatcaacg	tctattcga	accgatcaat	ttagtattgg	tggcgctat
120					
tctgtacgag	gttttagtgg	agaagaaacc	ttaagaggtg	actcgggcta	ttatgtacaa
180					
aatgaatggg	cattaccatt	tagaaaacaa	caaattactc	cataatgtagg	gatacatatt
240					
ggacatgtat	gggggccatc	tacagaaact	caatttaggta	ataccttaat	tggtggtgt
300					
gttgggtgtac	gtggtatgg	tggtgacgat	gtaaactatg	atgtatcact	aggaacacca
360					
attaagaaac	cagaaggttt	tgatacagat	acgcgt		
396					

<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2568

Xaa	Ile	Gln	Thr	Gly	Val	Arg	Met	Gly	His	Lys	Gln	Gly	Thr	Tyr	Thr
1							5			10			15		
Met	Arg	Phe	Arg	Ser	Gln	Phe	Thr	Asp	Gln	Arg	Leu	Phe	Gly	Thr	Asp
							20			25			30		
Gln	Phe	Ser	Ile	Gly	Gly	Arg	Tyr	Ser	Val	Arg	Gly	Phe	Ser	Gly	Glu
							35			40			45		
Glu	Thr	Leu	Arg	Gly	Asp	Ser	Gly	Tyr	Tyr	Val	Gln	Asn	Glu	Trp	Ala
							50			55			60		
Leu	Pro	Phe	Arg	Lys	Gln	Gln	Ile	Thr	Pro	Tyr	Val	Gly	Ile	Asp	Ile

65	70	75	80
Gly His Val Trp	Gly Pro Ser Thr	Glu Thr Gln Leu	Gly Asn Thr Leu
85	90	95	
Ile Gly Gly Val Val	Gly Val Arg Gly Met Val	Gly Asp Asp Val	Asn
100	105	110	
Tyr Asp Val Ser Leu	Gly Thr Pro Ile Lys Lys	Pro Glu Gly Phe	Asp
115	120	125	
Thr Asp Thr Arg			
130			
 <210> 2569			
<211> 330			
<212> DNA			
<213> Homo sapiens			
 <400> 2569			
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120 tgggagtcgg aagcgggcgg gtcgttcaact ttactcggt acacgtcagg ggagcagctt			
180 ggcaggggca ctaagatcac actgttcctc aaggacgatc agctggagta cttgaggag			
240 cgtcgccctca aggtatctggt caagaagcac tctgagttca tcagctaccc catctccctg			
300 tggactgaaa agacaacaga gaaggaaatt			
330			
 <210> 2570			
<211> 110			
<212> PRT			
<213> Homo sapiens			
 <400> 2570			
Leu Ala Ala Gly Ala Asp Val Ser Met Ile Gly Gln Phe Gly Val Gly			
1 5 10 15			
Phe Tyr Ser Ala Tyr Leu Val Ala Asp Arg Val Val Val Thr Thr Lys			
20 25 30			
His Asn Asp Asp Glu Gln Tyr Val Trp Glu Ser Gln Ala Gly Gly Ser			
35 40 45			
Phe Thr Val Thr Arg Asp Thr Ser Gly Glu Gln Leu Gly Arg Gly Thr			
50 55 60			
Lys Ile Thr Leu Phe Leu Lys Asp Asp Gln Leu Tyr Leu Glu Glu			
65 70 75 80			
Arg Arg Leu Lys Asp Leu Val Lys Lys His Ser Glu Phe Ile Ser Tyr			
85 90 95			
Pro Ile Ser Leu Trp Thr Glu Lys Thr Thr Glu Lys Glu Ile			
100 105 110			
 <210> 2571			
<211> 335			
<212> DNA			
<213> Homo sapiens			

<400> 2571
gaattcgcca atgttttctc cggttatgggc tccacagtaa cccttatcgg ccgctcccct
60
gtgctcctta aacatctcga taatgaacta tctgagctct ttactgagat cgctcggag
120
aaatggatg tccgtttagg gcagggAACG acagctatcg accaggtgga gaagcagcgt
180
gaagatgggt ctccctactt cgaaaccacc attacattg aagacggcag cactgttacc
240
ggtgacgcat tcctagttgc taccggacgt acccctaaca ccgaccgcct tggcctcgac
300
aatggttccg gtgtgaaggt tgaaaggaga cgcgt
335

<210> 2572
<211> 111
<212> PRT
<213> Homo sapiens

<400> 2572
Glu Phe Ala Asn Val Phe Ser Gly Met Gly Ser Thr Val Thr Leu Ile
1 5 10 15
Gly Arg Ser Pro Val Leu Leu Lys His Leu Asp Asn Glu Leu Ser Glu
20 25 30
Leu Phe Thr Glu Ile Ala Arg Glu Lys Trp Asp Val Arg Leu Gly Gln
35 40 45
Gly Thr Thr Ala Ile Asp Gln Val Glu Lys Gln Arg Glu Asp Gly Ser
50 55 60
Ser Tyr Phe Glu Thr Thr Ile Thr Phe Glu Asp Gly Ser Thr Val Thr
65 70 75 80
Gly Asp Ala Phe Leu Val Ala Thr Gly Arg Thr Pro Asn Thr Asp Arg
85 90 95
Leu Gly Leu Asp Asn Gly Ser Gly Val Lys Val Glu Arg Gly Arg
100 105 110

<210> 2573
<211> 460
<212> DNA
<213> Homo sapiens

<400> 2573
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gccggatcca taccggaccg tttcgtcagg gtggcggac atcgacgaca ccgcagatgc
120
cgagacgacg ttgatacgtc caccggcgcg gtccgtgatc cacgcccgtcg tcgcccgttgc
180
cgccactggc acgatgaggg ccatcaccga gaagagaacg gccaccactc gcagaccacc
240
tcgtcccaaga agagcggagg cgaaggcgat gacggcgatg accagagccg gtacagccaa
300
cgatcccacc agaacggagg agatgaaggt gagggcattg tgtgagggga ggatcgccgc
360

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<210> 2574
<211> 105
<212> PRT
<213> Homo sapiens

<400> 2574
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Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn
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<210> 2575
<211> 3954
<212> DNA
<213> Homo sapiens

<400> 2575
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 <212> PRT
 <213> Homo sapiens

<400> 2576
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 Thr Arg Thr Val Ser Cys Val Leu Glu Asp Gly Val Glu Thr Tyr Val
 65 70 75 80
 Lys Tyr Gln Pro Cys Ala Trp Gly Gln Pro Gln Cys Pro Gln Ser Ile
 85 90 95
 Met Tyr Arg Arg Phe Leu Arg Pro Arg Tyr Arg Val Ala Tyr Lys Thr
 100 105 110
 Val Thr Asp Met Glu Trp Arg Cys Cys Gln Gly Tyr Gly Asp Asp
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 165 170 175
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 195 200 205
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 Ala Asp Ala Ala Ala Arg Pro Gly Val His Glu Thr Leu Asn Glu Ile
 225 230 235 240
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 260 265 270
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 Cys Leu Ala Gly Leu Asp Gly Phe Arg Arg Gln Gln Gln Glu Asp Arg
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 Glu Arg Leu Arg Ala Met Glu Lys Leu Leu Ala Ser Val Glu Glu Arg
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 Gln Arg His Leu Ala Gly Leu Ala Val Gly Arg Arg Pro Pro Gln Glu
 340 345 350
 Cys Cys Ser Pro Glu Leu Gly Arg Arg Leu Ala Glu Leu Glu Arg Arg

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Thr Glu Leu Gly Gly Ala Ala Gly Gln Gly Gly His Pro Pro Gly Tyr		
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400		
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Thr Leu Gly Pro Ser Glu Glu Gln Glu Glu Ser Trp Pro Gly Ala Pro		
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Gly Gly Leu Ser His Trp Leu Pro Ala Ala Arg Gly Arg Leu Glu Gln		
435	440	445
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Asp Leu Leu Glu Glu Gln Val Ala Gly Ala Met Gln Ala Cys Gly Gln		
465	470	475
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Leu Ser Ala Leu Glu Arg Arg Val Leu Asp Ser Glu Gly Gln Leu Arg		
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Pro Arg Gly Pro Gly Ala Gly Pro Gly Val Gly Gly Pro Ser Arg Gly		
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690	695	700
Glu Arg Phe Arg Gly Leu Glu Glu Gly Gln Ala Gln Ala Gly Gln Cys		
705	710	715
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725	730	735
Leu Asp Thr Val Ala Gly Gly Leu Gln Gly Leu Arg Glu Gly Leu Ser		
740	745	750
Arg His Val Ala Gly Leu Trp Ala Gly Leu Arg Glu Thr Asn Thr Thr		
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980								985						990	
Ala	His	Ser	Glu	Glu	Pro	Leu	Thr	Ile	Phe	Ser	Gly	Ala	Leu	Leu	Tyr
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<210> 2577

<211> 343

<212> DNA

<213> Homo sapiens

<400> 2577

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<211> 100

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<213> Homo sapiens

<400> 2578

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Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln			
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<210> 2579

<211> 420

<212> DNA

<213> Homo sapiens

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<210> 2580

<211> 140

<212> PRT

<213> Homo sapiens

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Thr Ala Thr Glu Ile Arg Asn Gln Val Lys Lys Glu Met Ile Leu Ala			
35	40	45	
Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro			
50	55	60	
Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly			
65	70	75	80
Thr Ile Thr Ser Trp Val Val Ile Phe Ile Leu Pro Ile Asn Ser Ala			

85	90	95
Leu Asn Pro Ile Leu Tyr Thr Leu Thr Thr Arg Pro Phe Lys Glu Met		
100	105	110
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Lys Gly Gln Lys Thr Glu Ala Gly Val Cys Ser Arg		
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<210> 2581

<211> 459

<212> DNA

<213> Homo sapiens

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<210> 2582

<211> 153

<212> PRT

<213> Homo sapiens

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35 40 45
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Glu Lys Val Ile Ile Phe Cys Arg Thr Lys Arg Ala Cys Gln Arg Leu
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Ser Asp Asp Leu Asp Asp Arg Gly Phe Lys Thr Arg Ala Ile His Gly
85 90 95
Asp Leu Thr Gln Val Ala Arg Glu Lys Ala Leu Lys Lys Phe Arg His
100 105 110
Gly Glu Ala Thr Ile Leu Val Ala Thr Asp Val Ala Ala Arg Gly Ile
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Glu Lys Thr Tyr Val His Arg Ile Gly
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<211> 7098
<212> DNA
<213> Homo sapiens

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<210> 2584
 <211> 1186
 <212> PRT
 <213> Homo sapiens

<400> 2584
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 Thr Pro Gly Cys Asp Gly Ser Gly His Val Ser Gly Lys Tyr Ala Arg
 35 40 45
 His Arg Ser Val Tyr Gly Cys Pro Leu Ala Lys Lys Arg Lys Thr Gln
 50 55 60
 Asp Lys Gln Pro Gln Glu Pro Ala Pro Lys Arg Lys Pro Phe Ala Val
 65 70 75 80
 Lys Ala Asp Ser Ser Ser Val Asp Glu Cys Asp Asp Ser Asp Gly Thr
 85 90 95
 Glu Asp Met Asp Glu Lys Glu Glu Asp Glu Gly Glu Glu Tyr Ser Glu
 100 105 110
 Asp Asn Asp Glu Pro Gly Asp Glu Asp Glu Asp Glu Gly Asp

115	120	125
Arg Glu Gly Glu Glu Glu Ile Glu Glu Glu Asp Glu Asp Asp Asp Asp Glu		
130	135	140
Asp Gly Glu Asp Val Glu Asp Glu Glu Glu Glu Glu Glu Glu Glu Glu		
145	150	155
Glu Glu Glu Glu Glu Glu Asn Glu Asp His Gln Met Asn Cys His		
165	170	175
Asn Thr Arg Ile Met Gln Asp Thr Glu Lys Asp Asp Asn Asn Ser Asp		
180	185	190
Glu Tyr Asp Asn Tyr Asp Glu Leu Val Ala Lys Ser Leu Leu Asn Leu		
195	200	205
Gly Lys Ile Ala Glu Asp Ala Ala Tyr Arg Ala Arg Thr Glu Ser Glu		
210	215	220
Met Asn Ser Asn Thr Ser Asn Ser Leu Glu Asp Asp Ser Asp Lys Asn		
225	230	235
Glu Asn Leu Gly Arg Lys Ser Glu Leu Ser Leu Asp Leu Asp Ser Asp		
245	250	255
Val Val Arg Glu Thr Val Asp Ser Leu Lys Leu Leu Ala Gln Gly His		
260	265	270
Gly Val Val Leu Ser Glu Asn Met Asn Asp Arg Asn Tyr Ala Asp Ser		
275	280	285
Met Ser Gln Gln Asp Ser Arg Asn Met Asn Tyr Val Met Leu Gly Lys		
290	295	300
Pro Met Asn Asn Gly Leu Met Glu Lys Met Val Glu Glu Ser Asp Glu		
305	310	315
Glu Val Cys Leu Ser Ser Leu Glu Cys Leu Arg Asn Gln Cys Phe Asp		
325	330	335
Leu Ala Arg Lys Leu Ser Glu Thr Asn Pro Gln Glu Arg Asn Pro Gln		
340	345	350
Gln Asn Met Asn Ile Arg Gln His Val Arg Pro Glu Glu Asp Phe Pro		
355	360	365
Gly Arg Thr Pro Asp Arg Asn Tyr Ser Asp Met Leu Asn Leu Met Arg		
370	375	380
Leu Glu Glu Gln Leu Ser Pro Arg Ser Arg Val Phe Ala Ser Cys Ala		
385	390	395
Lys Glu Asp Gly Cys His Glu Arg Asp Asp Asp Thr Thr Ser Val Asn		
405	410	415
Ser Asp Arg Ser Glu Glu Val Phe Asp Met Thr Lys Gly Asn Leu Thr		
420	425	430
Leu Leu Glu Lys Ala Ile Ala Leu Glu Thr Glu Arg Ala Lys Ala Met		
435	440	445
Arg Glu Lys Met Ala Met Glu Ala Gly Arg Arg Asp Asn Met Arg Ser		
450	455	460
Tyr Glu Asp Gln Ser Pro Arg Gln Leu Pro Gly Glu Asp Arg Lys Pro		
465	470	475
Lys Ser Ser Asp Ser His Val Lys Lys Pro Tyr Tyr Gly Lys Asp Pro		
485	490	495
Ser Arg Thr Glu Lys Lys Glu Ser Lys Cys Pro Thr Pro Gly Cys Asp		
500	505	510
Gly Thr Gly His Val Thr Gly Leu Tyr Pro His His Arg Ser Leu Ser		
515	520	525
Gly Cys Pro His Lys Asp Arg Val Pro Pro Glu Ile Leu Ala Met His		
530	535	540
Glu Ser Val Leu Lys Cys Pro Thr Pro Gly Cys Thr Gly Arg Gly His		

545	550	555	560
Val Asn Ser Asn Arg Asn Ser His Arg Ser Leu Ser Gly Cys Pro Ile			
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Ala Ala Ala Glu Lys Leu Ala Lys Ala Gln Glu Lys His Gln Ser Cys			
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Asp Val Ser Lys Ser Ser Gln Ala Ser Asp Arg Val Leu Arg Pro Met			
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Cys Phe Val Lys Gln Leu Glu Ile Pro Gln Tyr Gly Tyr Arg Asn Asn			
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Val Pro Thr Thr Pro Arg Ser Asn Leu Ala Lys Glu Leu Glu Lys			
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Tyr Ser Lys Thr Ser Phe Glu Tyr Asn Ser Tyr Asp Asn His Thr Tyr			
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Gly Lys Arg Ala Ile Ala Pro Lys Val Gln Thr Arg Asp Ile Ser Pro			
660	665	670	
Lys Gly Tyr Asp Asp Ala Lys Arg Tyr Cys Lys Asp Pro Ser Pro Ser			
675	680	685	
Ser Ser Ser Thr Ser Ser Tyr Ala Pro Ser Ser Ser Asn Leu Ser			
690	695	700	
Cys Gly Gly Ser Ser Ala Ser Ser Thr Cys Ser Lys Ser Ser Phe			
705	710	715	720
Asp Tyr Thr His Asp Met Glu Ala Ala His Met Ala Ala Thr Ala Ile			
725	730	735	
Leu Asn Leu Ser Thr Arg Cys Arg Glu Met Pro Gln Asn Leu Ser Thr			
740	745	750	
Lys Pro Gln Asp Leu Cys Ala Thr Arg Asn Pro Asp Met Glu Val Asp			
755	760	765	
Glu Asn Gly Thr Leu Asp Leu Ser Met Asn Lys Gln Arg Pro Arg Asp			
770	775	780	
Ser Cys Cys Pro Ile Leu Thr Pro Leu Glu Pro Met Ser Pro Gln Gln			
785	790	795	800
Gln Ala Val Met Asn Asn Arg Cys Phe Gln Leu Gly Glu Gly Asp Cys			
805	810	815	
Trp Asp Leu Pro Val Asp Tyr Thr Lys Met Lys Pro Arg Arg Ile Asp			
820	825	830	
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835	840	845	
Glu Ala Leu Glu Glu Arg Arg Tyr Pro Gly Glu Val Thr Ile Pro Ser			
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865	870	875	880
Thr Leu Ser Gly Cys Pro Leu Ala Asp Lys Ser Ile Arg Ser Met Leu			
885	890	895	
Ala Thr Ser Ser Gln Glu Leu Lys Cys Pro Thr Pro Gly Cys Asp Gly			
900	905	910	
Ser Gly His Ile Thr Gly Asn Tyr Ala Ser His Arg Ser Leu Ser Gly			
915	920	925	
Cys Pro Arg Ala Lys Lys Ser Gly Ile Arg Ile Ala Gln Ser Lys Glu			
930	935	940	
Asp Lys Glu Asp Gln Glu Pro Ile Arg Cys Pro Val Pro Gly Cys Asp			
945	950	955	960
Gly Gln Gly His Ile Thr Gly Lys Tyr Ala Ser His Arg Ser Ala Ser			
965	970	975	
Gly Cys Pro Leu Ala Ala Lys Arg Gln Lys Asp Gly Tyr Leu Asn Gly			

980	985	990
Ser Gln Phe Ser Trp Lys Ser Val Lys Thr Glu Gly Met Ser Cys Pro		
995	1000	1005
Thr Pro Gly Cys Asp Gly Ser Gly His Val Ser Gly Ser Phe Leu Thr		
1010	1015	1020
His Arg Ser Leu Ser Gly Cys Pro Arg Ala Thr Ser Ala Met Lys Lys		
1025	1030	1035
Ala Lys Leu Ser Gly Glu Gln Met Leu Thr Ile Lys Gln Arg Ala Ser		
1045	1050	1055
Asn Gly Ile Glu Asn Asp Glu Glu Ile Lys Gln Leu Asp Glu Glu Ile		
1060	1065	1070
Lys Glu Leu Asn Glu Ser Asn Ser Gln Met Glu Ala Asp Met Ile Lys		
1075	1080	1085
Leu Arg Thr Gln Ile Thr Thr Met Glu Ser Asn Leu Lys Thr Ile Glu		
1090	1095	1100
Glu Glu Asn Lys Val Ile Glu Gln Gln Asn Glu Ser Leu Leu His Glu		
1105	1110	1115
Leu Ala Asn Leu Ser Gln Ser Leu Ile His Ser Leu Ala Asn Ile Gln		
1125	1130	1135
Leu Pro His Met Asp Pro Ile Asn Glu Gln Asn Phe Asp Ala Tyr Val		
1140	1145	1150
Thr Thr Leu Thr Glu Met Tyr Thr Asn Gln Asp Arg Tyr Gln Ser Pro		
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<210> 2585

<211> 542

<212> DNA

<213> Homo sapiens

<400> 2585

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<210> 2586

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2586

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				20					25				30		
Leu	Lys	His	His	Ser	Val	Ser	Pro	Ser	His	Ala	Phe	Trp	Ala	Ser	Ser
				35					40				45		
Pro	Gln	Arg	Ala	Lys	Val	Cys	Glu	His	Phe	Leu	Ser	Pro	Leu	Asn	Gly
				50					55				60		
Leu	Ser	His	Val	Ile	Leu	Thr	Arg	Leu	Leu	Cys	Phe	Ile	Thr	Ser	Val
				65					70				75		80
Ser	Gly	Ala	Ser	His	Pro	Arg	Glu	Glu	Trp	Trp	Gly	Cys	Arg	Leu	Thr
				85					90				95		
Leu	Gly	His	Leu	Ala	Ala	Ser	Val	Leu	Met	Thr	Thr	Leu	Leu	Pro	
				100					105				110		
Gln	Ala	Leu	Leu	Leu	Asn	Val	Leu	Ala	Leu						
				115					120						

<210> 2587

<211> 435

<212> DNA

<213> Homo sapiens

<400> 2587

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240					
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300					
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360					
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<210> 2588

<211> 145

<212> PRT

<213> Homo sapiens

<400> 2588

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		20				25						30			
Lys	Glu	Val	Pro	Arg	Val	Arg	Lys	Asp	Ala	Gly	Tyr	Pro	Pro	Leu	Val
		35				40					45				
Thr	Pro	Ser	Ser	Gln	Ile	Val	Gly	Thr	Gln	Ala	Val	Phe	Asn	Val	Leu
		50				55					60				
Met	Gly	Asn	Gly	Ser	Tyr	Lys	Asn	Leu	Thr	Ala	Glu	Phe	Ala	Asp	Leu
		65				70					75			80	
Met	Leu	Gly	Tyr	Tyr	Gly	Lys	Pro	Ile	Gly	Glu	Leu	Asn	Pro	Glu	Ile
		85				90					95				
Val	Glu	Met	Ala	Lys	Lys	Gln	Thr	Gly	Lys	Glu	Pro	Ile	Asp	Cys	Arg
		100				105					110				
Pro	Ala	Asp	Leu	Leu	Glu	Pro	Glu	Trp	Asp	Gln	Leu	Val	Glu	Gln	Ala
		115				120					125				
Lys	Ser	Leu	Glu	Gly	Phe	Asp	Gly	Ser	Asp	Glu	Asp	Val	Leu	Thr	Asn
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Ala															
		145													

<210> 2589

<211> 366

<212> DNA

<213> Homo sapiens

<400> 2589

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<210> 2590

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2590

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		20				25					30				
Gly	Arg	Gly	Val	Asp	Phe	Ala	Ile	Glu	Val	Val	Gly	Ile	Val	Glu	Val
		35			40						45				
Met	Glu	Gln	Ala	Tyr	Trp	Ala	Ala	Arg	Arg	Gly	Gly	Thr	Ile	Val	Tyr

50	55	60
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val	Leu Pro Ala Asn Asp	
65	70	75
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly	Gly Leu Gly	80
85		95
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val	Glu Thr Gly	
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Arg Leu Asp Leu Gly Gly Met Ile Thr Arg		
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<210> 2591
<211> 341
<212> DNA
<213> Homo sapiens

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180
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240
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341

<210> 2592
<211> 109
<212> PRT
<213> Homo sapiens

<400> 2592
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35 40 45
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
50 55 60
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
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<210> 2593
<211> 501
<212> DNA
<213> Homo sapiens

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 ttggcgccc aagcggatga agcggggat tatatgactt atattgtgtc ttccggaccc
 180
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgctg gggattttcg
 240
 gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa
 300
 ttttgacc tgaaggcgct gaagggggat aattccgata atattccagg cgtaccagg
 360
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgaa ggggatttat
 420
 aatcatatca agggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca
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 gctgagatgt ctcttaagct t
 501

<210> 2594
<211> 167
<212> PRT
<213> Homo sapiens

<400> 2594
 Arg Val Arg Pro Pro Glu Asp Phe Tyr Ala Gln Ile Pro Leu Leu Arg
 1 5 10 15
 Glu Leu Ile Ser Ala Leu Ser Trp Gly Phe Met Glu Val Asp Glu Tyr
 20 25 30
 Glu Ala Asp Asp Ile Ile Gly Thr Leu Ala Arg Gln Ala Asp Glu Ala
 35 40 45
 Gly Asp Tyr Met Thr Tyr Ile Val Ser Ser Asp Leu Asp Met Leu Gln
 50 55 60
 Ile Val Asp Glu Asn Thr Lys Met Tyr Arg Ile Leu Arg Gly Phe Ser
 65 70 75 80
 Asp Leu Glu Glu Met Asp Thr Pro Ala Ile Glu Glu Lys Tyr Gly Ile
 85 90 95
 Leu Lys Ser Gln Phe Leu Asp Leu Lys Ala Leu Lys Gly Asp Asn Ser
 100 105 110
 Asp Asn Ile Pro Gly Val Pro Gly Ile Gly Glu Lys Thr Ala Val Lys
 115 120 125
 Leu Leu Asn Glu Tyr Gly Ser Leu Glu Gly Ile Tyr Asn His Ile Lys
 130 135 140
 Glu Ile Ser Gly Ala Thr Gln Lys Lys Leu Ile Ala Gly Arg Glu Ser
 145 150 155 160
 Ala Glu Met Ser Leu Lys Leu
 165

<210> 2595
<211> 928
<212> DNA
<213> Homo sapiens

<400> 2595
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 120
 gtcacaattt ctggggctca ctcataaac accaacaat gggatattt gagaactt
 180
 cgcctgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg
 240
 tggtggtcgg actgcactgc caactggaga gaaaaatgga gtaaaagttcg agctgaaagg
 300
 aacagtgcgg gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa
 360
 tcggatccac tgaaacagaa acagagttt ccacttcaga aggaggcatt agaagctaat
 420
 gttaccagg atctgaagct tcctggcttc gttagaagaat cctgtgaaca tacagaccaa
 480
 tttcaattga gttcacaaat gcatgagttt atcagagagt atttggtaaa aagacaattt
 540
 tctacaaagg aggacacaaa taataaggaa caaggtgtgg ttattgattt tctaaaatta
 600
 agtgaggaga tgaagccaa tctagatggt gttgatttt tcaacaatgg tggttctgga
 660
 aacggtgaaa cgaaaaactgg gctgagactg aaagcaataa atctgcctt ggaaaaatgaa
 720
 gtaactgaaa tttcagctt gcaggtgcat ttggatgaat tccaaaaat cttatggaag
 780
 gaaagagaaaa tgccgcacagc tttggaaaaaa gaaatagaga gactggagtc ggctttgtct
 840
 ctgtggaaat ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt
 900
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 928

<210> 2596
<211> 309
<212> PRT
<213> Homo sapiens

<400> 2596
 Arg Ser Ser Arg Cys Asn Asn Asp Gln Leu Arg His Ala Ala Thr Trp
 1 5 10 15
 Trp Pro Leu Pro His Pro Pro Gly Ile Pro Val Ile Pro Ala Ser His
 20 25 30
 Phe Met Gly Tyr Asn Leu Met Leu Val Thr Ile Ser Gly Ala His Ser
 35 40 45
 Tyr Asn Thr Asn Lys Trp Asp Ile Cys Glu Glu Leu Arg Leu Arg Glu
 50 55 60
 Leu Glu Glu Val Lys Ala Arg Ala Ala Gln Met Glu Lys Thr Met Arg
 65 70 75 80
 Trp Trp Ser Asp Cys Thr Ala Asn Trp Arg Glu Lys Trp Ser Lys Val
 85 90 95
 Arg Ala Glu Arg Asn Ser Ala Gly Glu Gly Arg Gln Leu Arg Ile

100	105	110
Lys Leu Glu Met Ala Met Lys	Glu Ser Asp Pro Leu Lys Gln	Lys Gln
115	120	125
Ser Leu Pro Leu Gln Lys	Glu Ala Leu Glu Ala Asn Val Thr Gln Asp	
130	135	140
Leu Lys Leu Pro Gly Phe Val	Glu Glu Ser Cys Glu His Thr Asp Gln	
145	150	155
Phe Gln Leu Ser Ser Gln Met His Glu Ser Ile Arg Glu Tyr Leu Val		160
165	170	175
Lys Arg Gln Phe Ser Thr Lys	Glu Asp Thr Asn Asn Lys Glu Gln Gly	
180	185	190
Val Val Ile Asp Ser Leu Lys	Leu Ser Glu Glu Met Lys Pro Asn Leu	
195	200	205
Asp Gly Val Asp Leu Phe Asn Asn Gly	Gly Ser Gly Asn Gly Glu Thr	
210	215	220
Lys Thr Gly Leu Arg Leu Lys	Ala Ile Asn Leu Pro Leu Glu Asn Glu	
225	230	235
Val Thr Glu Ile Ser Ala Leu Gln Val	His Leu Asp Glu Phe Gln Lys	240
245	250	255
Ile Leu Trp Lys Glu Arg Glu Met Arg Thr Ala Leu Glu Lys Glu Ile		
260	265	270
Glu Arg Leu Glu Ser Ala Leu Ser	Leu Trp Lys Trp Lys Tyr Glu Glu	
275	280	285
Leu Lys Glu Ser Lys Pro Lys Asn Val Lys Glu Phe Asp Ile Leu Leu		
290	295	300
Gly Gln His Asn Asp		
305		

<210> 2597

<211> 631

<212> DNA

<213> Homo sapiens

<400> 2597

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ccatgggtgg gaatgcaaga gacacactct agacttacta gaggagcaag agcaggactt
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120
ctaaaaaggc ctttgatgcc aggttaggaa atttacattt tatccacaaa atccaaatcc
180
tccttaata atgagatgtc tttacaagtt tttggcaag agtggtatgg ctgacctgg
240
gtcctggaa ggaactgtgt gggatggtg tgcaaggactt acctagggtg ggaaaggcac
300
aagcagcatg gggctgtggc agtaccaga gttaaaggga catttcaggg aaagacttgg
360
caggacaaga ctttccttgg atggatggat gaataccaga aacaggacc caagagaaag
420
gccgagtttc atagggagag aagatgggtc atgtatgagg catgttgagc ttgtactgtat
480
ggtagacgt ccagtcgaca gtactaccca ctggccagtg agaaatgtgg gaccagggtt
540
caggagaaaa ctggggccgg aaatgagcat ttgaaaggcg ccagggtgga agcgggtgg
600

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tcactccacg agtgctat t cacttacgcg t
631

<210> 2598
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2598
Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg
1 5 10 15
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn
20 25 30
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser
35 40 45
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp
50 55 60
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg
65 70 75 80
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg
85 90 95
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg
100 105

<210> 2599
<211> 356
<212> DNA
<213> Homo sapiens

<400> 2599
nagatcttat acagggacgt gatgttggag aactactgga accttgttcc tctggactg
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tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg
120
aagagctgtg taaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggctgtggc
180
acagatatatcc ctccctaaatg tacaatcaag gatttgctac caaaagagaa gagcagtaca
240
gaagcagtat tccacacagt ggtgttggaa agacacgaaa gccctgacat tgaagacttt
300
tccttcaagg aaccccagaa aaatgtgcat gatTTTgagt gtcaatggag agatgn
356

<210> 2600
<211> 118
<212> PRT
<213> Homo sapiens

<400> 2600
Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val
1 5 10 15
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu
20 25 30
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg

35	40	45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro		
50	55	60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr		
65	70	75
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp		
85	90	95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe		
100	105	110
Glu Cys Gln Trp Arg Asp		
115		

<210> 2601

<211> 329

<212> DNA

<213> Homo sapiens

<400> 2601

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gccccatca tcatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcatcgcc
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tacttgtaca aggccgttc cctggaagag cgccaagcga tgatcgccgg cggtggtggg
120
gtcacccct tcggcttgcg ccacaacccc aaggacactg cgccatgcg ccgcgaaggc
180
ttgatcgct tgcccaaga cctcggtatc cgccgcacccg acgccacccg cgaactgttg
240
ggccccaaga gcgtggccga cctggtgag tggtccggtg gcttgtgcaa cccgcccccc
300
aagttcagga gctggtaaat gcgcgcct
329

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<210> 2602

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2602

Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu		
1	5	10
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln		
20	25	30
Ala Met Ile Ala Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His		
35	40	45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu		
50	55	60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu		
65	70	75
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys		
85	90	95
Asn Pro Pro Ala Lys Phe Arg Ser Trp		
100	105	

<210> 2603

<211> 423

<212> DNA

<213> Homo sapiens

<400> 2603

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 gcatcggttc ggtggtaccg aggtcgagga cttccttcac gccgttgttc gcggaggggca
 120
 gggttggtta agtggtcagg tgggccacga tctgggact gatcacctcg gtgaaatcga
 180
 agctctggtt accctgagcg gtcgcccaca cgacacggtc cacaccggag accagaccga
 240
 tctcggagat gatcgctaa cttcattgt cgttagaggat cttgcacgca tcgatgatgc
 300
 gcttgatctc cttggcagtg aagatgattt ccattgggt gttggccgac agatactgac
 360
 cggagctgg ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttgtccg
 420
 cgg
 423

<210> 2604

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2604

Met	Glu	Ile	Ile	Phe	Thr	Ala	Lys	Glu	Ile	Lys	Arg	Ile	Ile	Asp	Ala
1									5		10				15
Cys	Lys	Ile	Leu	Tyr	Asp	Asn	Glu	Gly	Tyr	Ala	Ile	Ile	Ser	Glu	Ile
									20		25				30
Gly	Leu	Val	Ser	Gly	Val	Asp	Arg	Val	Val	Ser	Ala	Thr	Ala	Gln	Gly
									35		40				45
Asn	Gln	Ser	Phe	Asp	Phe	Thr	Glu	Val	Ile	Ser	Ala	Gln	Ile	Val	Ala
									50		55				60
His	Leu	Thr	Thr	Tyr	His	Asn	Leu	Pro	Ser	Ala	Asn	Asn	Gly	Val	Lys
									65		70				80
Glu	Val	Leu	Asp	Leu	Gly	Thr	Thr	Glu	Pro	Met	Leu	Leu	Thr	Thr	Asp
									85		90				95
Leu	Gly	Val	Gly	Ala	Gln	Pro									
									100						

<210> 2605

<211> 354

<212> DNA

<213> Homo sapiens

<400> 2605

ngggagggag ggcatgtcaa aagcgactgt atccagaggg tttgatttaa acattttca
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 aaacatatgt ggcaaacagc ggggggaggg gatctcacca acgtttttct ccacttcttc
 120
 tttgcatgct gggacctgtt ccactttcaa aatgtgtcat tttggaagga aaggaggaa
 180

caactacttg aaaggaatac acgtcagttat gagcccttgc tcctcagcag aaggttgccc
 240
 caaagtacct cctctgaggg gagagaaagg agagaggagg agagacagct ttcatcaaatt
 300
 ggggcaccca ggactctagg gagagaggca cgtttcaca aaggcccttt gaga
 354

<210> 2606
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2606
 Met Ser Lys Ala Thr Val Ser Arg Gly Phe Asp Leu Asn Ile Phe Gln
 1 5 10 15
 Asn Ile Cys Gly Lys Gln Arg Gly Glu Gly Ile Ser Pro Thr Phe Phe
 20 25 30
 Ser Thr Ser Ser Leu His Ala Gly Thr Cys Ser Thr Phe Lys Met Cys
 35 40 45
 His Phe Gly Arg Lys Gly Arg Asn Asn Tyr Leu Lys Gly Ile His Val
 50 55 60
 Ser Met Ser Pro Phe Ser Ser Ala Glu Gly Cys Pro Lys Val Pro Pro
 65 70 75 80
 Leu Arg Arg Glu Lys Gly Glu Arg Arg Arg Asp Ser Phe His Gln Met
 85 90 95
 Gly His Pro Gly Leu
 100

<210> 2607
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 2607
 tgatcaagaa caatgatacg atatcctaac caacagagga agcaacggaa gttgttgttg
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 tttttatgct gttttttttt tttgagaacg gatcttgccc ctgccccag gccggaatgg
 120
 atgacatgga cagaaccccg tcggaaaaaaa gccggaatgt gcaaacccaa attcccacca
 180
 cacgggggcc ctaacaattt gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa
 240
 actttttttt ttttaaannn anaccccaa aaaaacccaa aaaaaaaaaatt taaaaaaaa
 297

<210> 2608
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2608
 Met Ile Arg Tyr Pro Asn Gln Gln Arg Lys Gln Arg Lys Leu Leu Leu
 1 5 10 15
 Phe Leu Cys Cys Phe Phe Leu Arg Thr Asp Leu Ala Pro Ala Pro

20	25	30
Arg Pro Glu Trp Met Thr Trp	Thr Glu Pro Arg Arg	Lys Lys Ala Gly
35	40	45
Met Cys Lys Pro Lys Phe Pro	Pro His Gly Gly	Pro Asn Asn Trp Ile
50	55	60
His Pro Xaa Lys Xaa Pro Xaa	Gln Lys Lys Xaa Lys	Thr Phe Phe Phe
65	70	75
Leu Xaa Xaa Xaa Pro Gln Lys Asn Gln Lys Lys	Phe Lys Lys	
85	90	95

<210> 2609

<211> 305

<212> DNA

<213> Homo sapiens

<400> 2609

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120
caattgccta cgaaaaaaatt tttttttcc cccccaaaaaa acacccccc ctcgcatctg
180
tgaaaaggctt acctcggggt cgtcatctcg gctgtcatcg tcggcaaatac actcagctgg
240
ccgtaccctt cgtcatcgcc cgggccacccg acctcgacgg cncagcgtgc acggcaacga
300
ccacc
305

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<210> 2610

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2610

Met Met Ser Gly Lys Asp Asp Pro Gly	Met Ala Lys Val Tyr Gly	Phe	
1	5	10	15
Val Asp Thr Ser Leu Thr Ile Pro Ile	Arg Ser Ser Gly	Asp Pro Cys	
20	25	30	
Val Pro Trp Thr Pro Ile Ala Tyr Glu	Ile Lys Ile Phe	Phe Pro Pro	
35	40	45	
Lys Lys His Pro Pro Leu Ala Ser Val	Lys Val Leu Pro Arg	Gly Arg	
50	55	60	
His Leu Gly Cys His Arg Arg Gln Ile	Thr Gln Leu Ala Val	Pro Phe	
65	70	75	80
Val Ile Ala Arg Ala Thr Asp Leu Asp	Gly Xaa Ala Cys	Thr Ala Thr	
85	90	95	
Thr Thr			

<210> 2611

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2611
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 60
 gtggggcaat ggcttcaggt ggacttcgac catccggta ccaacgcgac catcaccctg
 120
 acgcccagcg ccaccgctgt cggagcttagt gtgcgcgcgc tcgagggtggc aacagccaac
 180
 ggcaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgccctac
 240
 ggcgagacct catgggtccg gttcaccgcg accggcaccg acgacggctc cccggcgtg
 300
 cagttcgga tcaccgactt ctccgtgacg cagtacgacg cg
 342

<210> 2612
<211> 114
<212> PRT
<213> Homo sapiens

<400> 2612
 Ala Ala Ala Ile Asp Gly Asp Ser Ser Thr Ser Trp Val Ser Ser Ser
 1 5 10 15
 Leu Gln Thr Ala Val Gly Gln Trp Leu Gln Val Asp Phe Asp His Pro
 20 25 30
 Val Thr Asn Ala Thr Ile Thr Leu Thr Pro Ser Ala Thr Ala Val Gly
 35 40 45
 Ala Gln Val Arg Arg Val Glu Val Ala Thr Ala Asn Gly Thr Ser Thr
 50 55 60
 Ile Arg Phe Asp Gln Pro Gly Lys Pro Leu Thr Ala Ala Leu Pro Tyr
 65 70 75 80
 Gly Glu Thr Ser Trp Val Arg Phe Thr Ala Thr Gly Thr Asp Asp Gly
 85 90 95
 Ser Pro Gly Val Gln Phe Gly Ile Thr Asp Phe Ser Val Thr Gln Tyr
 100 105 110
 Asp Ala

<210> 2613
<211> 414
<212> DNA
<213> Homo sapiens

<400> 2613
 acgcgtgtgg gttgtgcaca gggcatggct gctctggaca ggcctgggcc ctgggcatca
 60
 ttctccctcct ccaaaaaggta agggtctgac ctaatggta tttgtctgat gttttccaga
 120
 tatgcccccta ctgggaaggg ccaagtgggc aggcaagatc tggggtgag cgaggtgggg
 180
 ctgggaagca ctccctgcttt tctgctgccc cagaacgaat gcaagttctg gcagcttc
 240
 ctcctcctgg gagggaggaaa ggagggctcg cttccaggta tcaggctgag ggagtggct
 300

ggagaccctc tagatggcca gcagaggctg qcctctgtga gaaggcttcc ttgcgtgact
 360
 ctggggcccc tcccaggctc tcctcggtgc aggcaaggac ttggggccagc atgg

414

<210> 2614

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2614

Met Val Leu Cys Leu Met Phe Ser Arg Tyr Ala Pro Thr Gly Lys Gly
 1 5 10 15

Gln Val Gly Arg Gln Ser Leu Gly Trp Ser Glu Val Gly Leu Gly Ser
 20 25 30

Thr Pro Ala Phe Leu Leu Pro Gln Asn Glu Cys Lys Phe Trp Gln Leu
 35 40 45

Leu Leu Leu Leu Gly Gly Lys Glu Gly Ser Pro Pro Gly Leu Arg
 50 55 60

Leu Arg Glu Trp Ala Gly Asp Pro Leu Asp Gly Gln Gln Arg Leu Ala
 65 70 75 80

Ser Val Arg Arg Leu Pro Cys Val Thr Leu Gly Pro Leu Pro Gly Ser
 85 90 95

Pro Arg Gly Arg Gln Gly Leu Gly Pro Ala Trp

100 105

<210> 2615

<211> 394

<212> DNA

<213> Homo sapiens

<400> 2615

nnngccgccc ccctcgcccg cagcgcgcctt cttttgcgcn ncgacgtcag ccagaaggcg
 60

gacgtcgacg ccatgctgaa ggaaacgctg gcccagttcg gccacatcga tatcctcgtc
 120

aacaatgcgg gcgtcacgca tgccggccat ttccctcgacg tgtgcgaaga cgatttcgac
 180

cgggtcatgc gcattaacct gaaatcgatg ttccctgtcg gccaggccgc ggccgcgcgag
 240

atggtaaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtaatgc ggaactggcc
 300

attccgaacc aggtgccgta cgtggtgtcg aaaggcgcca tcaaccagct gaccaaggtc
 360

atggccttga acctggcgcc gcacggtgcg cgct

394

<210> 2616

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2616

Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Leu Arg Xaa Asp Val

1	5	10	15
Ser	Gln	Ala	Asp
Lys	Ala	Asp	Val
	Asp	Ala	Met
		Leu	Lys
		Glu	Thr
		Leu	Ala
		Gln	
			20
			25
			30
Phe	Gly	His	Ile
		Asp	Ile
		Ile	Leu
		Val	Asn
		Asn	Ala
		Gly	Val
			Thr
			His
			Ala
			35
			40
			45
Ala	Asp	Phe	Leu
	Asp	Leu	Asp
		Asp	Val
		Cys	Glu
		Asp	Asp
		Phe	Asp
		Asp	Arg
		Val	Met
			50
			55
			60
Ile	Asn	Leu	Lys
	Ser	Met	Phe
		Leu	Cys
		Gly	Gln
		Ala	Ala
		Ala	Arg
			Gl
			65
			70
			75
			80
Met	Val	Lys	Arg
		Asn	Ser
		Gly	Cys
		Ile	Ile
		Asn	Met
		Ser	Ser
		Val	Asn
			85
			90
			95
Ala	Glu	Leu	Ala
		Ile	Pro
		Asn	Gln
		Val	Val
		Pro	Tyr
			Val
			Val
			Ser
			Lys
			Gly
			100
			105
			110
Ala	Ile	Asn	Gln
		Leu	Thr
		lys	Val
			Met
			Ala
			Leu
			Asn
			Leu
			Ala
			Pro
			His
			115
			120
			125
Gly	Ala	Arg	
			130

<210> 2617

<211> 513

<212> DNA

<213> Homo sapiens

<400> 2617

naccgggttgg	catcatgctc	acagcactgg	gggttccctt	ctttcttttc	ctcctcagaa
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agacattgtg	agatggaaa	tatcatggaa	acacctatac	tttccggctc	ccacttgaac
120					
gtcaccttgg	gaaatcacaa	gattctcaat	gacgtctccg	tatcattcca	agcgggagtt
180					
atgcacgcca	tacttggccc	caacggttct	gggaagacca	ccctggtagc	cacgttatgc
240					
ggagccctct	cccccgagtc	ggggagcgctc	aaattcgatg	gaacggatct	atccacgatg
300					
tccgcacccct	gtatcgcgcg	tcgtatttgcg	atcgcttggc	agagcgcgac	cgctccctct
360					
gacctcacccg	tacgtcacct	cgttggctac	gggagatatg	cccacacacc	gtggtggcag
420					
ataagggaca	ccagcgcgca	cagccatgtg	gaacaagcaa	tggagctggc	cgatgtcacf
480					
tgcttcgccc	atcgacgcgt	caccactctc	tca		
513					

<210> 2618

<211> 171

<212> PRT

<213> Homo sapiens

<400> 2618

Xaa	Arg	Leu	Ala	Ser	Cys	Ser	Gln	His	Trp	Gly	Phe	Pro	Ser	Phe	Phe
1	5	10	15												
Ser	Ser	Ser	Glu	Arg	His	Cys	Glu	Met	Gly	Asn	Ile	Met	Glu	Thr	Pro
			20			25			30						
Ile	Leu	Ser	Gly	Ser	His	Leu	Asn	Val	Thr	Leu	Gly	Asn	His	Lys	Ile

35	40	45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile		
50	55	60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys		
65	70	75
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp		
85	90	95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val		
100	105	110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val		
115	120	125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr		
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Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr		
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Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser		
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<210> 2619

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2619

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 240
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<210> 2620

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2620

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 Thr Asp Gly Asp Gly Pro Gln Glu Gln His Val Ile Phe Leu Asp Asn
 35 40 45
 Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
 50 55 60
 Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
 65 70 75 80
 Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala

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<210> 2621
<211> 1485
<212> DNA
<213> Homo sapiens

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<210> 2622
 <211> 83
 <212> PRT
 <213> Homo sapiens

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 Trp Leu Arg Ala His Ala Gln Thr His Ser Leu Pro Arg Leu Ser Lys
 35 40 45
 Ala Ser Pro Ser Pro Leu Leu Val Gly Gly Ala Arg Val Leu Leu Gly
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 Arg Leu Leu Glu Gly Arg Phe Ser Glu Leu Gln Gly Gln Gly Glu Gln
 65 70 75 80
 Leu Lys Gly

<210> 2623
 <211> 3524
 <212> DNA
 <213> Homo sapiens

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<210> 2624
 <211> 895
 <212> PRT
 <213> Homo sapiens

<400> 2624
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Gly	Met Val Met Phe Asn His Arg Leu Pro Pro Val Thr Ser Phe Thr		
50	55	60	
Arg	Pro Ala Gly Ser Ala Ala Pro Pro Pro Gln Cys Val Leu Ser Ser		
65	70	75	80
Ser	Thr Ser Ala Ala Pro Ala Ala Glu Pro Pro Pro Pro Ala Pro		
	85	90	95
Asp	Met Thr Phe Lys Lys Glu Pro Ala Ala Ser Ala Ala Phe Pro		
	100	105	110
Ser	Gln Arg Thr Ser Trp Gly Phe Leu Gln Ser Leu Val Ser Ile Lys		
	115	120	125
Gln	Glu Lys Pro Ala Asp Pro Glu Glu Gln Gln Ser His His His		
	130	135	140
His	His His His Tyr Gly Gly Leu Phe Ala Gly Ala Glu Glu Arg Ser		
145	150	155	160
Pro	Gly Leu Gly Gly Glu Gly Ser His Gly Val Ile Gln Asp		
	165	170	175
Leu	Ser Ile Leu His Gln His Val Gln Gln Pro Ala Gln His His		
	180	185	190
Arg	Asp Val Leu Leu Ser Ser Ser Arg Thr Asp Asp His His Gly		
	195	200	205
Thr	Glu Glu Pro Lys Gln Asp Thr Asn Val Lys Lys Ala Lys Arg Pro		
	210	215	220
Lys	Pro Glu Ser Gln Gly Ile Lys Ala Lys Arg Lys Pro Ser Ala Ser		
225	230	235	240
Ser	Lys Pro Ser Leu Val Gly Asp Gly Glu Gly Ala Ile Leu Ser Pro		
	245	250	255
Ser	Gln Lys Pro His Ile Cys Asp His Cys Ser Ala Ala Phe Arg Ser		
	260	265	270
Ser	Tyr His Leu Arg Arg His Val Leu Ile His Thr Gly Glu Arg Pro		
	275	280	285
Phe	Gln Cys Ser Gln Cys Ser Met Gly Phe Ile Gln Lys Tyr Leu Leu		
	290	295	300
Gln	Arg His Glu Lys Ile His Ser Arg Glu Lys Pro Phe Gly Cys Asp		
305	310	315	320
Gln	Cys Ser Met Lys Phe Ile Gln Lys Tyr His Met Glu Arg His Lys		
	325	330	335
Arg	Thr His Ser Gly Glu Lys Pro Tyr Lys Cys Asp Thr Cys Gln Gln		
	340	345	350
Tyr	Phe Ser Arg Thr Asp Arg Leu Leu Lys His Arg Arg Thr Cys Gly		
	355	360	365
Glu	Val Ile Val Lys Gly Ala Thr Ser Ala Glu Pro Gly Ser Ser Asn		
	370	375	380
His	Thr Asn Met Gly Asn Leu Ala Val Leu Ser Gln Gly Asn Thr Ser		
385	390	395	400
Ser	Ser Arg Arg Lys Thr Lys Ser Lys Ser Ile Ala Ile Glu Asn Lys		
	405	410	415
Glu	Gln Lys Thr Gly Lys Thr Asn Glu Ser Gln Ile Ser Asn Asn Ile		
	420	425	430
Asn	Met Gln Ser Tyr Ser Val Glu Met Pro Thr Val Ser Ser Ser Gly		
	435	440	445
Gly	Ile Ile Gly Thr Gly Ile Asp Glu Leu Gln Lys Arg Val Pro Lys		

450	455	460
Leu Ile Phe Lys Lys Gly Ser Arg Lys Asn Thr Asp Lys Asn Tyr Leu		
470	475	480
Asn Phe Val Ser Pro Leu Pro Asp Ile Val Gly Gln Lys Ser Leu Ser		
485	490	495
Gly Lys Pro Ser Gly Ser Leu Gly Ile Val Ser Asn Asn Ser Val Glu		
500	505	510
Thr Ile Gly Leu Leu Gln Ser Thr Ser Gly Lys Gln Gly Gln Ile Ser		
515	520	525
Ser Asn Tyr Asp Asp Ala Met Gln Phe Ser Lys Lys Arg Arg Tyr Leu		
530	535	540
Pro Thr Ala Ser Ser Asn Ser Ala Phe Ser Ile Asn Val Gly His Met		
545	550	555
Val Ser Gln Gln Ser Val Ile Gln Ser Ala Gly Val Ser Val Leu Asp		
565	570	575
Asn Glu Ala Pro Leu Ser Leu Ile Asp Ser Ser Ala Leu Asn Ala Glu		
580	585	590
Ile Lys Ser Cys His Asp Lys Ser Gly Ile Pro Asp Glu Val Leu Gln		
595	600	605
Ser Ile Leu Asp Gln Tyr Ser Asn Lys Ser Glu Ser Gln Lys Glu Asp		
610	615	620
Pro Phe Asn Ile Ala Glu Pro Arg Val Asp Leu His Thr Ser Gly Glu		
625	630	635
His Ser Glu Leu Val Gln Glu Glu Asn Leu Ser Pro Gly Thr Gln Thr		
645	650	655
Pro Ser Asn Asp Lys Ala Ser Met Leu Gln Glu Tyr Ser Lys Tyr Leu		
660	665	670
Gln Gln Ala Phe Glu Lys Ser Thr Asn Ala Ser Phe Thr Leu Gly His		
675	680	685
Gly Phe Gln Phe Val Ser Leu Ser Ser Pro Leu His Asn His Thr Leu		
690	695	700
Phe Pro Glu Lys Gln Ile Tyr Thr Thr Ser Pro Leu Glu Cys Gly Phe		
705	710	715
Gly Gln Ser Val Thr Ser Val Leu Pro Ser Ser Leu Pro Lys Pro Pro		
725	730	735
Phe Gly Met Leu Phe Gly Ser Gln Pro Gly Leu Tyr Leu Ser Ala Leu		
740	745	750
Asp Ala Thr His Gln Gln Leu Thr Pro Ser Gln Glu Leu Asp Asp Leu		
755	760	765
Ile Asp Ser Gln Lys Asn Leu Glu Thr Ser Ser Ala Phe Gln Ser Ser		
770	775	780
Ser Gln Lys Leu Thr Ser Gln Lys Glu Gln Lys Asn Leu Glu Ser Ser		
785	790	795
800		
Thr Gly Phe Gln Ile Pro Ser Gln Glu Leu Ala Ser Gln Ile Asp Pro		
805	810	815
Gln Lys Asp Ile Glu Pro Arg Thr Thr Tyr Gln Ile Glu Asn Phe Ala		
820	825	830
Gln Ala Phe Gly Ser Gln Phe Lys Ser Gly Ser Arg Val Pro Met Thr		
835	840	845
Phe Ile Thr Asn Ser Asn Gly Glu Val Asp His Arg Val Arg Thr Ser		
850	855	860
Val Ser Asp Phe Ser Gly Tyr Thr Asn Met Met Ser Asp Val Ser Glu		
865	870	875
880		
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885

890

895

<210> 2625
<211> 1398
<212> DNA
<213> Homo sapiens

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<210> 2626
<211> 137
<212> PRT
<213> Homo sapiens

<400> 2626
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35 40 45
Glu Gln Leu Gly Ser Tyr Asp Pro Leu Pro Asn Ser His Gly Glu Lys
50 55 60
Leu Val Ala Leu Asn Leu Asp Arg Ile Arg His Trp Ile Gly Cys Gly
65 70 75 80
Ala His Leu Ser Lys Pro Met Glu Lys Leu Leu Gly Leu Ala Gly Phe
85 90 95
Phe Pro Leu His Pro Met Met Ile Thr Asn Ala Glu Arg Leu Arg Arg
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Ala Thr Asp Thr Glu Ala Thr Glu Thr
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<210> 2627
<211> 320
<212> DNA
<213> Homo sapiens

<400> 2627
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<210> 2628
<211> 90
<212> PRT
<213> Homo sapiens

<400> 2628
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Ile	Ile	Ser	Cys
Phe	Ser	Gln	Val
Val	Ser	Lys	Ser
Ala	Pro	Phe	Ser
Ser	Ser	Thr	Ser
Phe	Ser	Val	Pro
Lys	Lys	Ala	Arg
Asp	Cys	Thr	Cys
Ile	Ser	Thr	Ala
Glu	Leu	Phe	Ile
Ile	Cys	Ser	Cys
Asp	Ser	Ala	
Phe	Phe	Arg	Ser
Ser	Gly	Arg	Glu
Gly	Ser	Arg	Arg
His	Ser	Phe	Lys
Ser	Phe	Val	Phe
Phe	Leu	Cys	Ile
Cys	Ile	Pro	Pro
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<210> 2629

<211> 650

<212> DNA

<213> Homo sapiens

<400> 2629

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<210> 2630

<211> 58

<212> PRT

<213> Homo sapiens

<400> 2630

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Phe	Ser	Lys	
Pro	Val	Val	
Ile	Leu	Pro	
Cys	Gln	His	
Lys		Asn	
Cys		Leu	
Ala		Cys	
Asn		Arg	
Asp		Asp	
Val		Gly	
Phe		Ala	
Gln		Arg	
Val		Asp	
Gly		Gly	
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Gln		Gly	
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Lys			
Gln			
Cys			
Arg			
Pro			
Val			
Gly			

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<210> 2631
<211> 5124
<212> DNA
<213> Homo sapiens

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<210> 2632
<211> 550
<212> PRT
<213> Homo sapiens

<400> 2632
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35 40 45
Ile Gln Ile Arg Lys Asn Glu Tyr Asp Leu Ile Leu Asn Ser Asp Ile
50 55 60
Asn Ser Asn His Tyr His Gln Trp Phe Tyr Phe Glu Val Ser Gly Met
65 70 75 80
Arg Pro Gly Val Ala Tyr Arg Phe Asn Ile Ile Asn Cys Glu Lys Ser
85 90 95
Asn Ser Gln Phe Asn Tyr Gly Met Gln Pro Leu Met Tyr Ser Val Gln
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Glu Ala Leu Asn Ala Arg Pro Trp Trp Ile Arg Met Gly Thr Asp Ile
115 120 125
Cys Tyr Tyr Lys Asn His Phe Ser Arg Ser Ser Val Ala Ala Gly Gly
130 135 140
Gln Lys Gly Lys Ser Tyr Tyr Thr Ile Thr Phe Thr Val Asn Phe Pro
145 150 155 160
His Lys Asp Asp Val Cys Tyr Phe Ala Tyr His Tyr Pro Tyr Thr Tyr
165 170 175
Ser Thr Leu Gln Met His Leu Gln Lys Leu Glu Ser Ala His Asn Pro
180 185 190
Gln Gln Ile Tyr Phe Arg Lys Asp Val Leu Cys Glu Thr Leu Ser Gly
195 200 205
Asn Ser Cys Pro Leu Val Thr Ile Thr Ala Met Pro Glu Ser Asn Tyr
210 215 220
Tyr Glu His Ile Cys His Phe Arg Asn Arg Pro Tyr Val Phe Leu Ser

225	230	235	240
Ala Arg Val His Pro Gly Glu Thr Asn Ala Ser Trp Val Met Lys Gly			
245	250	255	
Thr Leu Glu Tyr Leu Met Ser Asn Asn Pro Thr Ala Gln Ser Leu Leu			
260	265	270	
Glu Ser Tyr Ile Phe Lys Ile Val Pro Met Leu Asn Pro Asp Gly Val			
275	280	285	
Ile Asn Gly Asn His Arg Cys Ser Leu Ser Gly Glu Asp Leu Asn Arg			
290	295	300	
Gln Trp Gln Ser Pro Ser Pro Asp Leu His Pro Thr Ile Tyr His Ala			
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Lys Gly Leu Leu Gln Tyr Leu Ala Ala Val Lys Arg Leu Pro Leu Val			
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Tyr Cys Asp Tyr His Gly His Ser Arg Lys Lys Asn Val Phe Met Tyr			
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Gly Cys Ser Ile Lys Glu Thr Val Trp His Thr Asn Asp Asn Ala Thr			
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Ser Cys Asp Val Val Glu Asp Thr Gly Tyr Arg Thr Leu Pro Lys Ile			
370	375	380	
Leu Ser His Ile Ala Pro Ala Phe Cys Met Ser Ser Cys Ser Phe Val			
385	390	395	400
Val Glu Lys Ser Lys Glu Ser Thr Ala Arg Val Val Val Trp Arg Glu			
405	410	415	
Ile Gly Val Gln Arg Ser Tyr Thr Met Glu Ser Thr Leu Cys Gly Cys			
420	425	430	
Asp Gln Gly Lys Tyr Lys Gly Leu Gln Ile Gly Thr Arg Glu Leu Glu			
435	440	445	
Glu Met Gly Ala Lys Phe Cys Val Gly Leu Leu Arg Leu Lys Arg Leu			
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Thr Ser Pro Leu Glu Tyr Asn Leu Pro Ser Ser Leu Leu Asp Phe Glu			
465	470	475	480
Asn Asp Leu Ile Glu Ser Ser Cys Lys Val Thr Ser Pro Thr Thr Tyr			
485	490	495	
Val Leu Asp Glu Asp Glu Pro Arg Phe Leu Glu Glu Val Asp Tyr Ser			
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Ala Glu Ser Asn Asp Glu Leu Asp Ile Glu Leu Ala Glu Asn Val Gly			
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<211> 1569

<212> DNA

<213> Homo sapiens

<400> 2633

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<211> 59
<212> PRT
<213> Homo sapiens

<400> 2634

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Ser	Phe	Ala	Glu	Glu	Leu	Ser	Arg	Ile	Leu	Glu	Lys	Arg	Lys	His	Thr
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<210> 2635

<211> 1062

<212> DNA

<213> Homo sapiens

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<211> 63
<212> PRT
<213> Homo sapiens

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Arg Gly Arg Val Pro Pro Val Val Arg Arg Glu Glu Thr Ser Pro Lys
35 40 45
Gly Asp Gly Ser Ile Arg Arg Tyr Phe Cys Gly Glu Ala Ala Ala
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<210> 2637
<211> 1045
<212> DNA
<213> Homo sapiens

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<211> 263
<212> PRT
<213> Homo sapiens

<400> 2638
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Phe His Pro Leu Glu Trp Leu Ala Arg Glu Ala Cys Asn Gln Asp Ala
35 40 45
Leu Gln Glu Ala Gly Thr Phe Arg His Thr Leu Trp Lys Arg Val Gln
50 55 60
Gly Ala Val Thr Pro Leu Leu Ala Ser Met Ile Ser Phe Ile Asp Arg
65 70 75 80
Asp Gly Asn Leu Glu Leu Leu Thr Arg Pro Asp Thr Pro Pro Trp Ala
85 90 95
Arg Asp Leu Trp Met Phe Ile Phe Ser Asp Thr Met Leu Leu Asn Ile
100 105 110
Pro Leu Val Met Asn Asn Glu Arg His Lys Gly Glu Met Ala Tyr Ile
115 120 125
Val Val Gln Asn His Met Asn Leu Ser Glu Asn Ala Ser Asn Asn Val
130 135 140
Pro Phe Ser Trp Lys Ile Lys Asp Tyr Leu Glu Glu Leu Trp Val Gln
145 150 155 160
Ala Gln Tyr Ile Thr Asp Ala Glu Gly Leu Pro Lys Lys Phe Val Asp
165 170 175
Ile Phe Gln Gln Thr Pro Leu Gly Arg Phe Leu Ala Gln Leu His Gly
180 185 190
Glu Pro Gln Gln Glu Leu Leu Gln Cys Tyr Leu Lys Asp Phe Ile Leu
195 200 205
Leu Thr Met Arg Val Ser Thr Glu Glu Glu Leu Lys Phe Leu Gln Met
210 215 220
Ala Leu Trp Ser Cys Thr Arg Lys Leu Lys Ala Ala Ser Glu Ala Pro
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Arg Ser Gly Leu Gln Asn Phe
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<210> 2639
<211> 3777
<212> DNA
<213> Homo sapiens

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120

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480
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<212> PRT

<213> Homo sapiens

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Val Ser Glu Asn Glu His Gly Ala Pro Thr Arg Lys Asp Met Val Arg		
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<212> DNA

<213> Homo sapiens

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 Ile Asp Glu Cys Thr Arg Ile Val Ser Gln Asn Val Gly Asp Val Phe
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Arg	His	Gln	Lys	Ile	His	Thr	Arg	Lys	Arg	Tyr	Glu	Cys	Ser	Lys	Cys
				340				345				350			
Gln	Ala	Thr	Phe	Asn	Leu	Arg	Lys	His	Leu	Ile	Gln	His	Gln	Lys	Thr

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His Ala Ala Lys Thr Thr Ser Glu Cys Gln Glu Cys Gly Lys Ile Phe		
370	375	380
Arg His Ser Ser Leu Leu Ile Glu His Gln Ala Leu His Ala Gly Glu		
385	390	395
Glu Pro Tyr Lys Cys Asn Glu Arg Gly Lys Ser Phe Arg His Asn Ser		
405	410	415
Thr Leu Lys Ile His Gln Arg Val His Ser Gly Glu Lys Pro Tyr Lys		
420	425	430
Cys Ser Glu Cys Gly Lys Ala Phe His Arg His Thr His Leu Asn Glu		
435	440	445
His Arg Arg Ile His Thr Gly Tyr Arg Pro His Lys Cys Gln Glu Cys		
450	455	460
Val Arg Ser Phe Ser Arg Pro Ser His Leu Met Arg His Gln Ala Ile		
465	470	475
His Thr Ala Glu Lys Pro Tyr Ser Cys Ala Glu Cys Lys Glu Thr Phe		
485	490	495
Ser Asp Asn Asn Arg Leu Val Gln His Gln Lys Met His Thr Val Lys		
500	505	510
Thr Pro Tyr Glu Cys Gln Glu Cys Gly Glu Arg Phe Ile Cys Gly Ser		
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Thr Leu Lys Cys His Glu Ser Val His Ala Arg Glu Lys Gln Gly Phe		
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Phe Val Ser Gly Lys Ile Leu Asp Gln Asn Pro Glu Gln Lys Glu Lys		
545	550	555
Cys Phe Lys Cys Asn Lys Cys Glu Lys Thr Phe Ser Cys Ser Lys Tyr		
565	570	575
Leu Thr Gln Tyr Glu Arg Ile His Thr Arg Gly Val Lys Pro Phe Glu		
580	585	590
Cys Asp Gln Cys Gly Lys Ala Phe Gly Gln Ser Thr Arg Leu Ile His		
595	600	605
His Gln Arg Ile His Ser Arg Val Arg Leu Tyr Lys Trp Gly Glu Gln		
610	615	620
Gly Lys Ala Ile Ser Ser Ala Ser Leu Ile Lys Leu Gln Ser Phe His		
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Thr Lys Glu His Pro Phe Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser		
645	650	655
His Ser Ala His Leu Ser Lys His Gln Leu Ile His Ala Gly Glu Asn		
660	665	670
Pro Phe Lys Cys Ser Lys Cys Asp Arg Val Phe Thr Gln Arg Asn Tyr		
675	680	685
Leu Val Gln His Glu Arg Thr His Ala Arg Lys Lys Pro Leu Val Cys		
690	695	700
Asn Glu Cys Gly Lys Thr Phe Arg Gln Ser Ser Cys Leu Ser Lys His		
705	710	715
720		
Gln Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asp Tyr Cys Gly		
725	730	735
Lys Ala Phe Gly Leu Ser Ala Glu Leu Val Arg His Gln Arg Ile His		
740	745	750
755	760	765
Thr Gly Glu Lys Pro Tyr Val Cys Gln Glu Cys Gly Lys Ala Phe Thr		
770	775	780
Pro Tyr Arg Cys Gly Glu Cys Gly Lys Ala Phe Ala Gln Lys Ala Asn		

785	790	795	800
Leu Thr Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Ser Cys			
805		810	815
Asn Val Cys Gly Lys Ala Phe Val Leu Ser Ala His Leu Asn Gln His			
820	825	830	
Leu Arg Val His Thr Gln Glu Thr Leu Tyr Gln Cys Gln Arg Cys Gln			
835	840	845	
Lys Ala Phe Arg Cys His Ser Ser Leu Ser Arg His Gln Arg Val His			
850	855	860	
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<210> 2645

<211> 1018

<212> DNA

<213> Homo sapiens

<400> 2645

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<210> 2646

<211> 199
<212> PRT
<213> Homo sapiens

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35 40 45
Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Ile Thr Ile Leu Leu Leu Asn
50 55 60
Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
65 70 75 80
Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
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Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
100 105 110
Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
115 120 125
Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
130 135 140
Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
145 150 155 160
Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
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Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala
180 185 190
Ser Gly Ser His Lys Arg Ser
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<210> 2647
<211> 1368
<212> DNA
<213> Homo sapiens

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480

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<210> 2648

<211> 389

<212> PRT

<213> Homo sapiens

<400> 2648

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35 40 45

Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser Trp

50 55 60

Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu Glu

65 70 75 80

Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe Gly

85 90 95

Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu Glu

100 105 110

Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile Glu

115 120 125

Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser Leu

130	135	140
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165	170	175
Val Gly Gly Asp Ala Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met		
180	185	190
Lys Val Tyr Arg Arg Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro		
195	200	205
Leu Lys Ala Thr His Ala Val Lys Gly Val Thr Gly His Glu Val Cys		
210	215	220
Asn Tyr Phe Trp Asn Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile		
225	230	235
Glu Asn Phe His Val Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile		
245	250	255
Tyr Gln Thr His Lys Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu		
260	265	270
Tyr Leu Ser Val Ile Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro		
275	280	285
Glu Thr Trp Ile Val Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro		
290	295	300
Leu Asn Asn Arg Cys Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys		
305	310	315
Gln Thr Leu Val Ser Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp		
325	330	335
Asn Ile Leu Cys Lys Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly		
340	345	350
Trp Ala Pro Ala Ser Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro		
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<210> 2649

<211> 1299

<212> DNA

<213> Homo sapiens

<400> 2649

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300
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360
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<210> 2650

<211> 428

<212> PRT

<213> Homo sapiens

<400> 2650

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								20	25			30			
Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
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Cys	Ser	Arg	Thr	Cys	Gly	Gly		Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys
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Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
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Ser	Asn	Val	Asp	Cys	Pro	Pro	Glu	Ala	Gly	Asp	Phe	Arg	Ala	Gln	Gln
						85		90		95					
Cys	Ser	Ala	His	Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp
						100		105		110					
Leu	Pro	Val	Ser	Asn	Asp	Pro	Asp	Asn	Pro	Cys	Ser	Leu	Lys	Cys	Gln
						115		120		125					
Ala	Lys	Gly	Thr	Thr	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp

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Cys Gln Ile Val	Gly Cys Asp His Gln	Leu Gly Ser Thr Val Lys Glu
	165	170
Asp Asn Cys Gly Val	Cys Asn Gly Asp	Gly Ser Thr Cys Arg Leu Val
	180	185
Arg Gly Gln Tyr Lys	Ser Gln Leu Ser Ala	Thr Lys Ser Asp Asp Thr
	195	200
Val Val Ala Ile Pro	Tyr Gly Ser Arg His Ile	Arg Leu Val Leu Lys
	210	215
Gly Pro Asp His Leu	Tyr Leu Glu Thr Lys	Thr Leu Gln Gly Thr Lys
	225	230
Gly Glu Asn Ser Leu	Ser Ser Thr Gly	Thr Phe Leu Val Asp Asn Ser
	245	250
Ser Val Asp Phe Gln	Lys Phe Pro Asp	Lys Glu Ile Leu Arg Met Ala
	260	265
Gly Pro Leu Thr Ala Asp	Phe Ile Val Lys	Ile Arg Asn Ser Gly Ser
	275	280
Ala Asp Ser Thr Val	Gln Phe Ile	Phe Tyr Gln Pro Ile Ile His Arg
	290	295
Trp Arg Glu Thr Asp	Phe Pro Cys Ser	Ala Thr Cys Gly Gly Gly
	305	310
Tyr Gln Leu Thr Ser	Ala Glu Cys Tyr	Asp Leu Arg Ser Asn Arg Val
	325	330
Val Ala Asp Gln	Tyr Cys His Tyr	Tyr Pro Glu Asn Ile Lys Pro Lys
	340	345
Pro Lys Leu Gln	Glu Cys Asn Leu Asp	Pro Cys Pro Ala Ser Asp Gly
	355	360
Tyr Lys Gln Ile Met	Pro Tyr Asp Leu	Tyr His Pro Leu Pro Arg Trp
	370	375
Glu Ala Thr Pro Trp	Thr Ala Cys Ser	Ser Ser Cys Gly Gly Gly Ile
	385	390
Gln Ser Pro Gly Ser	Phe Leu Cys Gly	Gly His Pro Gly Ala Cys
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<210> 2651

<211> 628

<212> DNA

<213> Homo sapiens

<400> 2651

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300

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<211> 209

<212> PRT

<213> Homo sapiens

<400> 2652

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Leu	Asn	Leu	Ile	Phe	Ile	Val	Leu	Glu	Thr	Gly	Arg	Val	Thr	Lys	Thr
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Lys	Asp	Gly	His	Glu	Val	Arg	Thr	Cys	Lys	Val	Ala	Asp	Lys	Thr	Gly
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Ser	Ile	Asn	Ile	Ser	Val	Trp	Asp	Asp	Val	Gly	Asn	Leu	Ile	Gln	Pro
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Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
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Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
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Pro	Ala	Ser	Glu	Asn	Gln	Asn	Gly	Asn	Gly	Met	Ser	Ala	Pro	Pro	Gly
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Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
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<211> 2103

<212> DNA

<213> Homo sapiens

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<210> 2654
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 2654
 Tyr Leu Asn Lys Val Gly Val Leu Lys Arg Lys His Phe Pro Gly Ile
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 Ser Glu Val Asn Phe Leu Arg Phe Glu Cys Cys Phe Lys Thr Leu Ser
 20 25 30
 Ser Asp Ser Lys Cys Leu Leu Leu Gly Ala Val Ala His Ala Cys
 35 40 45
 Asn Pro Ser Thr Leu Gly Gly Arg Gly Arg Ile Thr Arg Ser Gly
 50 55 60
 Asp Arg Asp Tyr Pro Gly
 65 70

<210> 2655
 <211> 1752
 <212> DNA
 <213> Homo sapiens

<400> 2655
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 120
 tCTTCTTGT gATGCTTTT ttagAGACGG ATTTTTCC agATTTGTGC ttCTTGTGTT
 180
 ttGCTTTTTT tttGATGATC aATAACTTAT tCTGGATCTC agGTTTGTAA gACTTGAATG
 240
 caAGAGAATG aAGACCTCA CGCTTCTCT gTAAGTTTC ATTCAAACACA TCTTCAATT
 300
 tCTTTTTTTT CTTTTCTTC TTtttGCC tcATTTAGT tagTTTGAGT ttCTTGTGGC
 360

tctgtagtga ctgctcta ataatatccc ttacaacttt gtggcaggtt atttctggat
420
gatcaactgtg acttccattt acatgtattt ggcaagatTT tagagtattt tcttttaatg
480
gactgggttc aatctttattt ctggaaagctt caccgtattt ttcctgattt tctataaaacc
540
ttatttcacc tggactgaga ggctctccaa agccagtaac ttcccctgga ctccttggtt
600
tctctaaattt ttcttacaa caatcagttt ttttaatttc acaaggcctg cgaattctaa
660
tttcatagtt ggatTTTact cccatttcaa cagagatgtc atgattatcc aagatcattt
720
tagcaggaca gcaagctgga tcaaaattat tttcctgctc tttcttgaag gaagagggca
780
ggctatctct gctacatcta tgTTctccat tacttgtact aacatagtca cacttcaatt
840
tctccaattt aatccgaggt actctttgta ttttaatggg tggaaattgga aattctgggg
900
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960
cataaggcgt ctccaaataa tcataacgaa gaataactgc cctgcattca tggataggct
1020
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1080
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1140
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1200
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1260
cttcccaggt cctataaggc aaagttaggtc ttcgatgtaa ggttaggtctg cgatggggag
1320
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1380
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1440
ggaaatgccc aatagctgga atttcccaca tggtctccat acaagttgga gctgcttgag
1500
ctagaagttt tcttccccat tcttctattt cctttgact agcttctct gcttctttc
1560
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1620
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1740
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1752

<210> 2656
<211> 493
<212> PRT
<213> Homo sapiens

<400> 2656

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 Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met
 35 40 45
 Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg
 50 55 60
 Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val
 65 70 75 80
 Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys
 85 90 95
 Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu
 100 105 110
 Val Asn Pro Leu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln
 115 120 125
 Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His
 130 135 140
 Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg
 145 150 155 160
 Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe
 165 170 175
 Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe
 180 185 190
 Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro
 195 200 205
 Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn
 210 215 220
 Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys
 225 230 235 240
 Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile
 245 250 255
 Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr
 260 265 270
 Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys
 275 280 285
 Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe
 290 295 300
 Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu
 305 310 315 320
 Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys
 325 330 335
 Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser
 340 345 350
 Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu
 355 360 365
 Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg
 370 375 380
 Ala Lys Lys Lys Lys Lys Lys Lys Lys Asp Val Leu Asn
 385 390 395 400
 Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys
 405 410 415
 Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

420	425	430
Ala Lys His Lys Lys His Lys Ser Gly Lys Lys Ser Val Ser Lys Lys		
435	440	445
Ala Ile Thr Lys Lys Arg Lys Thr Val Ile Lys Ser Pro Thr Val Pro		
450	455	460
Glu Phe Gln Leu Ile Cys Thr Asn Leu Asp Glu Leu Arg Glu Leu Ile		
465	470	475
Thr Lys Ile Glu Asn Glu Leu Lys Asp Leu Glu Lys Lys		
485	490	

<210> 2657

<211> 972

<212> DNA

<213> Homo sapiens

<400> 2657

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 120
 gtcctgttgt ctaagggcca aggggcagta gcccctcctc caggggcctt gagcacagag
 180
 gcgtcagatc agagttgcca tcttcaactt gatatgcccc ccacatcccc gcagctctgt
 240
 gggcccaggc tactggcatc cacatgactc ccagggcctg agtccacact gcctgaggac
 300
 aggagcctca aaactgaaat gcacgtgctt cggaccagcc atccgtgcct gacaatgtcc
 360
 tatggaaaca cccacacgtg tgcaaatgc tgcaatgaaa gggtccgtca tggggttggg
 420
 taattccagc tgggaccgccc taggagcgcc atgcagctgt gggaaacaagg ttgctgtcca
 480
 cacagacatg aagggattcc ccgtggaatg aggttagaaa aggaaggca agagtggacg
 540
 tataagatgc cccatgctgt gtgaaaactg ccatgagaga gagacggagg aagggggaga
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 aagtgggaga cagagaccaa catctgcact gcctgtgcct gccacactct cccctcgaaa
 660
 ccagagggtg gcctctgggg aggggctggc gagagggat gccaggcctg ggctgcagca
 720
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 780
 ccagcaccaa gcatgcattt ttgggtatgt ggaacttacg cagagcgtgg cggtctggca
 840
 ggcggctgtg caggggctgg gcatggatat acagggctcg gttagaactcc tggcagtccc
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 960
 tggggttccg ga
 972

<210> 2658

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2658

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Cys	Thr	Ala	Cys	Ala	Cys	His	Thr	Leu	Pro	Ser	Gly	Pro	Glu	Gly	Gly
										25			30		
Leu	Trp	Gly	Ala	Gly	Glu	Arg	Gly	Cys	Gln	Ala	Trp	Ala	Ala	Ala	
										40		45			
Asp	Leu	Gly	Gly	His	Gly	Gly	Ser	Met	Pro	Ser	Thr	Ala	Gly	Trp	Gly
										55		60			
Ala	Leu	Pro	Gly	Pro	Ala	Pro	Ser	Met	His	Gly	Trp				
										70		75			

<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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120					
aatggagaga	acaccttcaa	acgcatttgg	cccccgctgg	agaagcctgt	ggagaaggtg
180					
cagagggtgg	aggcccctccc	gaggcccgtt	ccgcagaacc	tgccacagcc	acagatgcc
240					
ccctatgcct	tcgcgcaccc	acccttcccc	ctgcctcccg	tgccgcctgt	gttcaacaac
300					
ttccccactca	acatggggcc	tatcccagcc	ccgtacgtgc	cccctctgcc	caacgtgcgg
360					
gtcaactatg	acttcggtcc	catccacatg	cccctggagc	acaacctgcc	catgcacttt
420					
ggccccccagc	cgcggcatcg	cttctgatgg	ccccgaatcc	ccattgagca	gcacaaaagcc
480					
cgtttggggt	aggagtgtgg	atggagaacc	ctcccccaag	gctggtgtct	gtaccattgc
540					
atcctaagtc	agottgaagg	gtaggctgg	tttcttccca	ccccctttcct	agaagggcta
600					
ctgctcctgg	aagagtggac	ggatccataa	taaagacgtc	ccaaatggtg	aaaaaaaaaaa
660					
aaaaaaaaaaa	aaaaaaaaaaa	aaaaaaaaaaa	a		
691					

<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

Ser	Glu	Cys	Glu	Ala	Glu	Glu	Gln	Lys	Arg	Lys	Asn	Gly	Glu	Asn	
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Thr	Phe	Lys	Arg	Ile	Gly	Pro	Pro	Leu	Glu	Lys	Pro	Val	Glu	Lys	Val

20	25	30
Gln Arg Val Glu Ala Leu Pro Arg Pro Val Pro Gln Asn Leu Pro Gln		
35	40	45
Pro Gln Met Pro Pro Tyr Ala Phe Ala His Pro Pro Phe Pro Leu Pro		
50	55	60
Pro Val Arg Pro Val Phe Asn Asn Phe Pro Leu Asn Met Gly Pro Ile		
65	70	75
Pro Ala Pro Tyr Val Pro Pro Leu Pro Asn Val Arg Val Asn Tyr Asp		
85	90	95
Phe Gly Pro Ile His Met Pro Leu Glu His Asn Leu Pro Met His Phe		
100	105	110
Gly Pro Gln Pro Arg His Arg Phe		
115	120	

<210> 2661

<211> 1395

<212> DNA

<213> Homo sapiens

<400> 2661

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 120
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 180
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 240
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 300
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 360
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 420
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 480
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 540
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 660
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 720
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 780
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 840
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 900
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 960
 caagtgtac cactttctga tgtggataca acttctgcta cagatattca aagagtagct
 1020

gtgctatgtg tttccagatc tgcttattgt ttgggttcaa gccaccagg aggattcctt
 1080
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 1140
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 1200
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 1260
 cctttcata ttaggagaca tgcatggta aaaattaata aagatgacaa gtcagttgtc
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 1380
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 1395

<210> 2662
 <211> 415
 <212> PRT
 <213> Homo sapiens

<400> 2662
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 20 25 30
 Lys Leu Glu Met Lys Ala Leu Arg Glu Leu Asp Arg Phe Ser Val Leu
 35 40 45
 Asn Ser Gln His Met Phe Glu Val Leu Ala Ala Met Asn His Arg Ser
 50 55 60
 Leu Ile Leu Leu Asp Glu Cys Ser Lys Val Val Leu Asp Asn Ile His
 65 70 75 80
 Gly Cys Pro Leu Arg Ile Met Ile Asn Ile Leu Gln Ser Cys Lys Asp
 85 90 95
 Leu Gln Tyr His Asn Leu Asp Leu Phe Lys Gly Leu Ala Asp Tyr Val
 100 105 110
 Ala Ala Thr Phe Asp Ile Trp Lys Phe Arg Lys Val Leu Phe Ile Leu
 115 120 125
 Ile Leu Phe Glu Asn Leu Gly Phe Arg Pro Val Gly Leu Met Asp Leu
 130 135 140
 Phe Met Lys Arg Ile Val Glu Asp Pro Glu Ser Leu Asn Met Lys Asn
 145 150 155 160
 Ile Leu Ser Ile Leu His Thr Tyr Ser Ser Leu Asn His Val Tyr Lys
 165 170 175
 Cys Gln Asn Lys Glu Gln Phe Val Glu Val Met Ala Ser Ala Leu Thr
 180 185 190
 Gly Tyr Leu His Thr Ile Ser Ser Glu Asn Leu Leu Asp Ala Val Tyr
 195 200 205
 Ser Phe Cys Leu Met Asn Tyr Phe Pro Leu Ala Pro Phe Asn Gln Leu
 210 215 220
 Leu Gln Lys Asp Ile Ile Ser Glu Leu Leu Thr Ser Asp Asp Met Lys
 225 230 235 240
 Asn Ala Tyr Lys Leu His Thr Leu Asp Thr Cys Leu Lys Leu Asp Asp
 245 250 255
 Thr Val Tyr Leu Arg Asp Ile Ala Leu Ser Leu Pro Gln Leu Pro Arg

260	265	270
Glu Leu Pro Ser Ser His Thr Asn Ala Lys Val Ala Glu Val Leu Ser		
275	280	285
Ser Leu Leu Gly Gly Glu Gly His Phe Ser Lys Asp Val His Leu Pro		
290	295	300
His Asn Tyr His Ile Asp Phe Glu Ile Arg Met Asp Thr Asn Arg Asn		
305	310	315
Gln Val Leu Pro Leu Ser Asp Val Asp Thr Thr Ser Ala Thr Asp Ile		
325	330	335
Gln Arg Val Ala Val Leu Cys Val Ser Arg Ser Ala Tyr Cys Leu Gly		
340	345	350
Ser Ser His Pro Arg Gly Phe Leu Ala Met Lys Met Arg His Leu Asn		
355	360	365
Ala Met Gly Phe His Val Ile Leu Val Asn Asn Trp Glu Met Asp Lys		
370	375	380
Leu Glu Met Glu Asp Ala Val Thr Phe Leu Lys Thr Lys Ile Tyr Ser		
385	390	395
Val Glu Ala Leu Pro Val Ala Ala Val Asn Val Gln Ser Thr Gln		
405	410	415

<210> 2663

<211> 1024

<212> DNA

<213> Homo sapiens

<400> 2663

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120
ctcggcaata ttgattttag acaggcagac ttctgcgtta tgacccggct gctgggctac
180
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360
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420
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780
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840

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1020
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1024

<210> 2664
<211> 199
<212> PRT
<213> Homo sapiens

<400> 2664
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Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser
35 40 45
Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn
50 55 60
Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
65 70 75 80
Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
85 90 95
Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
100 105 110
Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
115 120 125
Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
130 135 140
Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
145 150 155 160
Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
165 170 175
Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala
180 185 190
Ser Gly Ser His Lys Arg Ser
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<210> 2665
<211> 720
<212> DNA
<213> Homo sapiens

<400> 2665
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120
gcgcctaattgc gaagcggttgc agtcgcttga ctcacctgag gctctccaag gataccttca
180

atgcctgcac tgtaaggag ctgctttcc cgggtgctgg cgagaacgga agccttcctt
 240
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 360
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 420
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 480
 caaaccgaca tcaccttga acatatcatg gccctacta agatgtcctc tcccagccca
 540
 cccgtgtgg atccctatct cttgccagag gagcatccct cagcccatga atactacgat
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 ccaaattgact acattggaga catccatcg gagatggaca gggaggagct ggagctggag
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<210> 2666

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2666

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Tyr	Glu	Val	Cys	Gln	Val	Asn	Gly	Arg	Asp	Leu	Ser	Arg	Ala	Thr	His
			20												30
Asp	Gln	Ala	Val	Glu	Ala	Phe	Lys	Thr	Ala	Lys	Glu	Pro	Ile	Val	Val
															45
Gln	Val	Leu	Arg	Arg	Thr	Pro	Arg	Thr	Lys	Met	Phe	Thr	Pro	Pro	Ser
			50												60
Glu	Ser	Gln	Leu	Val	Asp	Thr	Gly	Thr	Gln	Thr	Asp	Ile	Thr	Phe	Glu
			65												80
His	Ile	Met	Ala	Leu	Thr	Lys	Met	Ser	Ser	Pro	Ser	Pro	Pro	Val	Leu
															95
Asp	Pro	Tyr	Leu	Leu	Pro	Glu	Glu	His	Pro	Ser	Ala	His	Glu	Tyr	Tyr
															110
Asp	Pro	Asn	Asp	Tyr	Ile	Gly	Asp	Ile	His	Gln	Glu	Met	Asp	Arg	Glu
															125
Glu	Leu	Glu	Leu	Glu	Val	Asp	Leu	Tyr	Arg	Met	Asn	Ser	Gln	Asp	
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Lys	Leu	Gly	Leu	Thr	Val	Cys	Tyr	Arg							
															150

<210> 2667

<211> 289

<212> DNA

<213> Homo sapiens

<400> 2667

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 120
 tgggtgccag gcctatgtt gaggacaaga catttcaaag aaagtattaa attcattcac
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 gagtgccggc tccgcgggga gagctgcctt gtacactgcc tggccggggt ctccaggagc
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 289

<210> 2668

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2668

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Asn	Phe	Lys	Asp	Ala	Arg	Asp	Ala	Glu	Gln	Leu	Ser	Lys	Asn	Lys	Gly
								20		25				30	
Asn	Pro	Phe	Ser	Val	Cys	Pro	Arg	Trp	Val	Pro	Gly	Leu	Cys	Trp	Arg
								35		40				45	
Thr	Arg	His	Phe	Lys	Glu	Ser	Ile	Lys	Phe	Ile	His	Glu	Cys	Arg	Leu
								50		55				60	
Arg	Gly	Glu	Ser	Cys	Leu	Val	His	Cys	Leu	Ala	Gly	Val	Ser	Arg	Ser
								65		70				80	
Val	Thr	Leu	Val	Ile	Ala	Tyr	Ile	Met	Thr	Val	Thr	Asp	Phe	Gly	Trp
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<211> 4285

<212> DNA

<213> Homo sapiens

<400> 2669

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 <213> Homo sapiens

<400> 2670
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 Leu Cys Cys Phe Ser Cys Ile Arg Arg Trp Leu Thr Glu Gln Arg Ala
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 Gln Cys Pro His Cys Arg Ala Pro Leu Gln Leu Arg Glu Leu Val Asn
 65 70 75 80
 Cys Arg Trp Ala Glu Glu Val Thr Gln Gln Leu Asp Thr Leu Gln Leu
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 Cys Ser Leu Thr Lys His Glu Glu Asn Glu Lys Asp Lys Cys Glu Asn
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 His His Glu Lys Leu Ser Val Phe Cys Trp Thr Cys Lys Lys Cys Ile
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 Cys His Gln Cys Ala Leu Trp Gly Gly Met His Gly His Thr Phe
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 Lys Pro Leu Ala Glu Ile Tyr Glu Gln His Val Thr Lys Val Asn Glu
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 Glu Val Ala Lys Leu Arg Arg Arg Leu Met Glu Leu Ile Ser Leu Val
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 Gln Glu Val Glu Arg Asn Val Glu Ala Val Arg Asn Ala Lys Asp Glu
 180 185 190
 Arg Val Arg Glu Ile Arg Asn Ala Val Glu Met Met Ile Ala Arg Leu
 195 200 205
 Asp Thr Gln Leu Lys Asn Lys Leu Ile Thr Leu Met Gly Gln Lys Thr
 210 215 220
 Ser Leu Thr Gln Glu Thr Glu Leu Leu Glu Ser Leu Leu Gln Glu Val
 225 230 235 240
 Glu His Gln Leu Arg Ser Cys Ser Lys Ser Glu Leu Ile Ser Lys Ser

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260	265	270
Ser Phe Val Thr Thr Pro Val Pro Pro Asp Phe Thr Ser Glu Leu Val		
275	280	285
Pro Ser Tyr Asp Ser Ala Thr Phe Val Leu Glu Asn Phe Ser Thr Leu		
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Arg Gln Arg Ala Asp Pro Val Tyr Ser Pro Pro Leu Gln Val Ser Gly		
305	310	315
Leu Cys Trp Arg Leu Lys Val Tyr Pro Asp Gly Asn Gly Val Val Arg		
325	330	335
Gly Tyr Tyr Leu Ser Val Phe Leu Glu Leu Ser Ala Gly Leu Pro Glu		
340	345	350
Thr Ser Lys Tyr Glu Tyr Arg Val Glu Met Val His Gln Ser Cys Asn		
355	360	365
Asp Pro Thr Lys Asn Ile Ile Arg Glu Phe Ala Ser Asp Phe Glu Val		
370	375	380
Gly Glu Cys Trp Gly Tyr Asn Arg Phe Phe Arg Leu Asp Leu Leu Ala		
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Gln Val Arg Ser Pro Thr Phe Phe Gln Lys Ser Arg Asp Gln His Trp		
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Tyr Ile Thr Gln Leu Glu Ala Ala Gln Thr Ser Tyr Ile Gln Gln Ile		
435	440	445
Asn Asn Leu Lys Glu Arg Leu Thr Ile Glu Leu Ser Arg Thr Gln Lys		
450	455	460
Ser Arg Asp Leu Ser Pro Pro Asp Asn His Leu Ser Pro Gln Asn Asp		
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Leu Glu Gly Pro Thr Thr Ala Ser Val Arg Glu Ala Lys Glu Asp		
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Glu Glu Asp Glu Glu Lys Ile Gln Asn Glu Asp Tyr His His Glu Leu		
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Ser Asp Gly Asp Leu Asp Leu Asp Leu Val Tyr Glu Asp Glu Val Asn		
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Gln Leu Asp Gly Ser Ser Ser Ala Ser Ser Thr Ala Thr Ser Asn		
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Thr Glu Glu Asn Asp Ile Asp Glu Glu Thr Met Ser Gly Glu Asn Asp		
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Val Glu Tyr Asn Asn Met Glu Leu Glu Gly Glu Leu Met Glu Asp		
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Lys Asp Arg Ser Ser Ile Glu Asn Leu Trp Gly Leu Gln Pro Arg Pro		
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Pro Ala Ser Leu Leu Gln Pro Thr Ala Ser Tyr Ser Arg Lys Asp Lys		
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Met Leu Lys Arg Leu Lys Thr Gln Met Ala Gly Val Arg Cys Met Lys		
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Ser Gly Asp Met Gln Thr Ser Leu Phe Ser Ala Asp Gln Ala Ala Leu		
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Ala Ala Cys Gly Thr Glu Asn Ser Gly Arg Leu Gln Asp Leu Gly Met		
740	745	750
Glu Leu Leu Ala Lys Ser Ser Val Ala Asn Cys Tyr Ile Arg Asn Ser		
755	760	765
Thr Asn Lys Lys Ser Asn Ser Pro Lys Pro Ala Arg Ser Ser Val Ala		
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Gly Ser Leu Ser Leu Arg Arg Ala Val Asp Pro Gly Glu Asn Ser Arg		
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Ser Lys Gly Asp Cys Gln Thr Leu Ser Glu Gly Ser Pro Gly Ser Ser		
805	810	815
Gln Ser Gly Ser Arg His Ser Ser Pro Arg Ala Leu Ile His Gly Ser		
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Ile Gly Asp Ile Leu Pro Lys Thr Glu Asp Arg Gln Cys Lys Ala Leu		
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Asp Ser Asp Ala Val Val Ala Val Phe Ser Gly Leu Pro Ala Val		
850	855	860
Glu Lys Arg Arg Lys Met Val Thr Leu Gly Ala Asn Ala Lys Gly Gly		
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His Leu Glu Gly Leu Gln Met Thr Asp Leu Glu Asn Asn Ser Glu Thr		
885	890	895
Gly Glu Leu Gln Pro Val Leu Pro Glu Gly Ala Ser Ala Ala Pro Glu		
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Glu Gly Met Ser Ser Asp Ser Asp Ile Glu Cys Asp Thr Glu Asn Glu		
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Glu Gln Glu Glu His Thr Ser Val Gly Gly Phe His Asp Ser Phe Met		
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Val Met Thr Gln Pro Pro Asp Glu Asp Thr His Ser Ser Phe Pro Asp		
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<212> DNA
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Phe Ala Ile Leu Ser Pro Ser Pro Tyr Leu Arg Pro Arg Gly Arg Ala
 50 55 60
His His Pro Pro Ser Arg Leu Gly Gly Arg Ala Pro Ser Trp Pro
 65 70 75 80
Pro Pro Ser Arg Pro Leu Asn Ser Pro Gly Asp Cys Gly Tyr Cys His
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Arg Leu Ala Ser Thr Ala Ser Ser Arg Ser Thr Gln Met Arg Thr Val
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Gly Gly Lys Gly Asp Ala Thr Pro Ser Glu Pro Pro Leu Pro Leu
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Pro Arg Pro Xaa Pro Lys Trp Pro Pro Pro Ser Arg Pro Pro Pro Pro
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Pro Leu Pro Pro Leu Ala Arg Asn Arg Tyr Arg Arg Gly Pro
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Ser Ser Arg Glu Arg Gln Ser Pro Ser Lys Leu Gln Gln Val Ser Ser
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Gly Thr Trp Ala Ser Arg Phe Pro Trp Gln Pro Thr Ser Val Ala Leu
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<212> DNA
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4380
agcagggcac cagctgctgg ggtgggactt gggcttcag atcataaact acgtattccc
4440
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4500
ggtgggaatg agaactatga accaggaagg agagatccca gctgccaagt ctggggtag
4560
cagactggag cccaggggtg atggagactt ttgatggctt ttggcaggga cagacttgga
4620

cacaaaaccg atccatagaa gggcttccca aaccttgttt tgcaacatcc caaattgtct
 4680
 ccagttgaag gaaggcctt atcagattca tagatgagct ttcattgtaa aaataaatgt
 4740
 actttgcacc acttcatgat ggagggagaa gtggcacag gctcgtaagt ctatcatctc
 4800
 acagctgaag caggatcccc agggctaccg ctgtggtctc tcatggaggg aaggtagga
 4860
 cttcttgcc aagtttagatg tcacctgatg ggtttataca gggtggctgc accttcaggt
 4920
 ggtttccagg agtgaggcca tggcaacctg agcctctggc cttgctgcaa gggccgagc
 4980
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 5035

<210> 2674 .
<211> 690
<212> PRT
<213> Homo sapiens

<400> 2674
Ala Ala Gly Phe Arg Ala Met Ile Pro Pro Gln Glu Ala Ser Ala Arg
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Arg Arg Glu Ile Glu Asp Lys Leu Lys Gln Glu Glu Glu Thr Leu Ser
 20 25 30
Phe Ile Arg Asp Ser Leu Glu Lys Ser Asp Gln Leu Thr Lys Asn Met
 35 40 45
Val Ser Ile Leu Ser Ser Phe Glu Ser Arg Leu Met Lys Leu Glu Asn
 50 55 60
Ser Ile Ile Pro Val His Lys Gln Thr Glu Asn Leu Gln Arg Leu Gln
 65 70 75 80
Glu Asn Val Glu Lys Thr Leu Ser Cys Leu Asp His Val Ile Ser Tyr
 85 90 95
Tyr His Val Ala Ser Asp Thr Glu Lys Ile Ile Arg Glu Gly Pro Thr
 100 105 110
Gly Arg Leu Glu Glu Tyr Leu Gly Ser Met Ala Lys Ile Gln Lys Ala
 115 120 125
Val Glu Tyr Phe Gln Asp Asn Ser Pro Asp Ser Pro Glu Leu Asn Lys
 130 135 140
Val Lys Leu Leu Phe Glu Arg Gly Lys Glu Ala Leu Glu Ser Glu Phe
 145 150 155 160
Arg Ser Leu Met Thr Arg His Ser Lys Val Val Ser Pro Val Leu Ile
 165 170 175
Leu Asp Leu Ile Ser Gly Asp Asp Leu Glu Ala Gln Glu Asp Val
 180 185 190
Thr Leu Glu His Leu Pro Glu Ser Val Leu Gln Asp Val Ile Arg Ile
 195 200 205
Ser Arg Trp Leu Val Glu Tyr Gly Arg Asn Gln Asp Phe Met Asn Val
 210 215 220
Tyr Tyr Gln Ile Arg Ser Ser Gln Leu Asp Arg Ser Ile Lys Gly Leu
 225 230 235 240
Lys Glu His Phe His Lys Ser Ser Ser Ser Gly Val Pro Tyr Ser
 245 250 255
Pro Ala Ile Pro Asn Lys Arg Lys Asp Thr Pro Thr Lys Lys Pro Val

260	265	270
Lys Arg Pro Gly Thr Ile Arg	Lys Ala Gln Asn Leu	Leu Lys Gln Tyr
275	280	285
Ser Gln His Gly Leu Asp Gly	Lys Gly Ser Asn Leu Ile Pro	
290	295	300
Leu Glu Gly Arg Asp Asp Met	Leu Asp Val Glu Thr Asp Ala	Tyr Ile
305	310	315
His Cys Val Ser Ala Phe Val	Lys Leu Ala Gln Ser Glu	Tyr Gln Leu
325	330	335
Leu Ala Asp Ile Ile Pro Glu His	His Gln Lys Lys Thr Phe Asp Ser	
340	345	350
Leu Ile Gln Asp Ala Leu Asp Gly	Leu Met Leu Glu Gly Glu Asn Ile	
355	360	365
Val Ser Ala Ala Arg Lys Ala	Ile Val Arg His Asp Phe Ser	Thr Val
370	375	380
Leu Thr Val Phe Pro Ile Leu Arg His	Leu Lys Gln Thr Lys Pro Glu	
385	390	395
Phe Asp Gln Val Leu Gln Gly Thr Ala	Ala Ser Thr Lys Asn Lys Leu	
405	410	415
Pro Gly Leu Ile Thr Ser Met Glu	Thr Ile Gly Ala Lys Ala	Leu Glu
420	425	430
Asp Phe Ala Asp Asn Ile Lys Asn Asp Pro Asp Lys	Glu Tyr Asn Met	
435	440	445
Pro Lys Asp Gly Thr Val His	Glu Leu Thr Ser Asn Ala Ile	Leu Phe
450	455	460
Leu Gln Gln Leu Leu Asp Phe Gln Glu	Thr Ala Gly Ala Met Leu	Ala
465	470	475
Ser Gln Glu Thr Ser Ser Ala Thr	Ser Tyr Ser Ser Glu Phe Ser	
485	490	495
Lys Arg Leu Leu Ser Thr Tyr Ile Cys	Lys Val Leu Gly Asn Leu Gln	
500	505	510
Leu Asn Leu Leu Ser Lys Ser Lys Val	Tyr Glu Asp Pro Ala Leu Ser	
515	520	525
Ala Ile Phe Leu His Asn Asn Tyr	Asn Tyr Ile Leu Lys Ser Leu Glu	
530	535	540
Lys Ser Glu Leu Ile Gln Leu Val	Ala Val Thr Gln Lys Thr Ala Glu	
545	550	555
Arg Ser Tyr Arg Glu His Ile Glu Gln	Ile Gln Thr Tyr Gln Arg	
565	570	575
Ser Trp Leu Lys Val Thr Asp Tyr	Ile Ala Glu Lys Asn Leu Pro Val	
580	585	590
Phe Gln Pro Gly Val Lys Leu Arg	Asp Lys Glu Arg Gln Ile Ile Lys	
595	600	605
Glu Arg Phe Lys Gly Phe Asn Asp	Gly Leu Glu Glu Leu Cys Lys Ile	
610	615	620
Gln Lys Ala Trp Ala Ile Pro Asp	Thr Glu Gln Arg Asp Arg Ile Arg	
625	630	635
Gln Ala Gln Lys Thr Ile Val Lys	Glu Thr Tyr Gly Ala Phe Leu Gln	
645	650	655
Lys Phe Gly Ser Val Pro Phe Thr	Lys Asn Pro Glu Lys Tyr Ile Lys	
660	665	670
Tyr Gly Val Glu Gln Val Gly Asp Met	Ile Asp Arg Leu Phe Asp Thr	
675	680	685
Ser Ala		

690

<210> 2675

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2675

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 120
 gcagtgggag tccctgcgct tcggcgaata tggagaccct ctgcagtgtg gagcctgggt
 180
 cgggcagtgc gctcttaca tcgtgatcat gattttgaa aagtctgtcg tcttcatcgt
 240
 cctcctccata ctccagtgga aaaaggtggc cctattgaat ccaattgaaa accccgaccc
 300
 gaagctggcc atcgtcatgc tgatcgcccc cttctttgtc aacgctttga tgtttgggt
 360
 agtggacaat ttccctcatga gaaaggggaa gacgaaagct aagctagaag aaaggggagc
 420
 caaccaggac tcgaggaatg ggagcaaggt ccgcgtaccgg agggccgcatt cccacgagga
 480
 gtctgagtct gagatcctga tctcagccga tgatgagatg gaggagtccg acgtggagga
 540
 ggacctccgc agactgaccc ccctcaagcc tgtgaagaaa aagaagcacc gctttggct
 600
 acccgttatga cacattccca tgctgggggt gacggggaggg ccccgccagc cgctggtgt
 660
 cagaggcat cccacagcat cgttccttac cctctctctg cccttcaccc g
 711

<210> 2676

<211> 180

<212> PRT

<213> Homo sapiens

<400> 2676

Met	Leu	Leu	Ile	Tyr	Val	Gly	Val	Arg	Ala	Val	Ser	Val	Leu	Val	Glu
1															15
Trp	Gln	Gln	Trp	Glu	Ser	Leu	Arg	Phe	Gly	Glu	Tyr	Gly	Asp	Pro	Leu
															20
Gln	Cys	Gly	Ala	Trp	Val	Gly	Gln	Cys	Ala	Leu	Tyr	Ile	Val	Ile	Met
															25
Ile	Phe	Glu	Lys	Ser	Val	Val	Phe	Ile	Val	Leu	Leu	Leu	Gln	Trp	
															30
															35
															40
															45
															50
															55
															60
															65
															70
															75
															80
															85
															90
															95
															100
															105
															110
															Leu
															Glu
															Arg
															Gly
															Ala
															Asn
															Gln
															Asp
															Ser
															Arg
															Asn
															Gly
															Ser
															Asn
															Gly
															Val

115	120	125
Arg Tyr Arg Arg Ala Ala Ser His Glu Glu Ser Glu Ser Glu Ile Leu		
130	135	140
Ile Ser Ala Asp Asp Glu Met Glu Glu Ser Asp Val Glu Glu Asp Leu		
145	150	155
Arg Arg Leu Thr Pro Leu Lys Pro Val Lys Lys Lys His Arg Phe		
165	170	175
Gly Leu Pro Val		
180		

<210> 2677

<211> 735

<212> DNA

<213> Homo sapiens

<400> 2677

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 120
 gagcccccttt tgcagggcag gagctgggga gtggtagga catcagtccc tcaggttaggg
 180
 ggagttagca catcaggtcc atatgtgtcc caggagcatc cctagctggc cgccctgagt
 240
 gctgcatggg gcagagatgg gcaggtacac ggccctgcct gtgtgagcac ccctccctcc
 300
 gctggggcct tcagcctctt gagggagaac ttctccatg cgccgagccc agacatgagc
 360
 gctgcgtccc tctgcgcact ggagcagctc atgatggccc aggcccagga atgtgtgtt
 420
 gagggcctctt caccacgtc ctccatggcc cccaaagact gcctggccca gctgcgcctg
 480
 ggcgcaggagg ccgcccaggat gagctcggtc acccggtgtca ggatgcaggg ggtggggccg
 540
 agctggggtc agagcccagg tccaggcatg cgtgagctct cccacctctt tccttgtgt
 600
 tcagccccga gccagctgtt gtcctgtcc ctgggggggc tggtcaggaa cctggggacc
 660
 cgagcctctg cttccaggaa atggcacaaa gcagcaggaa ctgaggtgcc agggaggctg
 720
 ctgggatggt ggtcg
 735

<210> 2678

<211> 170

<212> PRT

<213> Homo sapiens

<400> 2678

1	5	10	15
Leu Ala Ala Leu Ser Ala Ala Trp Gly Arg Asp Gly Gln Val His Gly			
Pro Ala Cys Val Ser Thr Pro Pro Ser Ala Gly Ala Phe Ser Leu Leu			
20	25	30	
Arg Glu Asn Phe Ser His Ala Pro Ser Pro Asp Met Ser Ala Ala Ser			

35	40	45
Leu Cys Ala Leu Glu Gln Leu Met Met Ala Gln Ala Gln Glu Cys Val		
50	55	60
Phe Glu Gly Leu Ser Pro Pro Ala Ser Met Ala Pro Gln Asp Cys Leu		
65	70	75
Ala Gln Leu Arg Leu Ala Gln Glu Ala Ala Gln Val Ser Ser Gly Thr		
85	90	95
Arg Val Arg Met Gln Gly Val Gly Pro Ser Trp Gly Gln Ser Pro Gly		
100	105	110
Pro Gly Met Arg Glu Leu Ser His Leu Leu Pro Cys Val Ser Ala Pro		
115	120	125
Ser Gln Leu Leu Ser Cys Ser Leu Gly Gly Leu Val Arg Asn Leu Gly		
130	135	140
Thr Arg Ala Ser Ala Ser Arg Glu Trp His Lys Ala Ala Gly Thr Glu		
145	150	155
Val Pro Gly Arg Leu Leu Gly Trp Trp Ser		
165	170	

<210> 2679

<211> 560

<212> DNA

<213> Homo sapiens

<400> 2679

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tgtccttcca agtgcgtacc ggagtccaga tatttctgtc aagtcagcca accaggaagg
120
ggctgcagac aaagtgcggc aacaggact ccaccaggcc atggagctca tcccacaaga
180
cgccctcaccg cacaggaggg ctgaccctcag ggaaacgtgt caccaggaca cagcacgaag
240
ctcaaaaaggc gctagcatgc tctgtgcagc tgccagactc tgccctgaag aatcacaggg
300
cactcttagt agcgctgcag cagccagcag gccctggatg gccaggtgtg cagtgggag
360
360
gcacaggggg tgcaccagga cgccagccaga cctggggccag ttgcgcgcga ctcttctcca
420
420
ttccagaggt ccaggaagca cctgtcaatg tggaagtcag aatgctcagg ccaaataccg
480
480
agatcaacta actattcagg ttgaaccaga ggcctggcg gggcatcca actgccacc
540
540
cgtcagactg agggacgcgt
560

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<210> 2680

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2680

Met Glu Leu Ile Pro Gln Asp Ala Ser Pro His Arg Arg Ala Asp Pro		
1	5	10
Arg Glu Thr Cys His Gln Asp Thr Ala Arg Ser Ser Lys Gly Ala Ser		

	20	25	30												
Met	Leu	Cys	Ala	Ala	Ala	Arg	Leu	Cys	Pro	Glu	Glu	Ser	Gln	Gly	Thr
	35				40									45	
Leu	Val	Ser	Ala	Ala	Ala	Ala	Ser	Arg	Pro	Trp	Met	Ala	Arg	Cys	Ala
	50				55									60	
Val	Gly	Arg	His	Arg	Gly	Cys	Thr	Arg	Thr	Gln	Pro	Asp	Leu	Gly	Gln
	65				70				75					80	
Phe	Ala	Pro	Thr	Leu	Leu	His	Ser	Arg	Gly	Pro	Gly	Ser	Thr	Cys	Gln
	85					90								95	
Cys	Gly	Ser	Gln	Asn	Ala	Gln	Ala	Lys	Tyr	Arg	Asp	Gln	Leu	Thr	Ile
	100					105								110	
Gln	Val	Glu	Pro	Glu	Ala	Trp	Ala	Gly	Ala	Ser	Asn	Cys	Pro	Pro	Val
	115					120								125	
Arg	Leu	Arg	Asp	Ala											
		130													

<210> 2681

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2681

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 atctgttgtt gtgacttctcc aataataacta gtatgcctgg gtcattctg cttcttctct
 120
 tcttggatag ttatattcat gaccatgtgc agagggggtg atggggcaag ctcacaagc
 180
 cccggaggtc tgtggctgag gtgtaccttgc gctttgttgc ctggaaactgc tctgactctg
 240
 ctcttcgttc ttctctggcc tgtgtcacta cagctctgac tcctttccac cttggagttt
 300
 agcttccctg ccaggaaagc taaggagtag gagttgttct tgaaaacaaa tgccgagcga
 360
 tgtgtctgtg tcatctggcc tcgagaaggt tcttcattct ctgaatctga gagacgtgca
 420
 ggacaacgtt ccagatttgtt tttcagact aatggttcat ctctttttt ctgttcatcc
 480
 attttccttt tcctgtttc tgtatctctt ggttaacagct tgtggatttg atcttcagag
 540
 ggtttttcctt cttgttaactt ttcttctctc agctttctca agctt
 585

<210> 2682

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2682

Met	Asp	Glu	Gln	Lys	Lys	Arg	Asp	Glu	Pro	Leu	Val	Leu	Lys	Thr	Asn
1														15	
Leu	Glu	Arg	Cys	Pro	Ala	Arg	Leu	Ser	Asp	Ser	Glu	Asn	Glu	Glu	Pro
	20				25									30	
Ser	Arg	Gly	Gln	Met	Thr	Gln	Thr	His	Arg	Ser	Ala	Phe	Val	Ser	Lys

35	40	45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys		
50	55	60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys		
65	70	75
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser		80
85	90	95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His		
100	105	110
Met Val Met Lys		
115		

<210> 2683

<211> 498

<212> DNA

<213> Homo sapiens

<400> 2683

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nacgcgttac actgactcca aaactctcct tggtggcccta ggtgaaacct catggccaac
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atcacctgga tggccaaacca cactggaagg ttggatttca tcctcatggg actcttcaga
120
cgatccaaac atccagctct acttagtgtg gtcatcttg tggtttccct gatggcgttg
180
tctgaaaatg ctgtcctgat cttctgata cactgtgaca cttacctcca cacccccatg
240
tacttttca tcagtcaatt gtctctcatg gacatggcgt acatttctgt cactgtgcc
300
aagatgtcc tggaccaggt catgggtgtg aataagatct cagccctga gtgtggatg
360
cagatgtcc tctatctgac actagcaggt tcggaatttt tccttctagc caccatggcc
420
tatgaccgct acgtggccat ctgccatcct ctccgttacc ctgtcctcat gaaccatagg
480
gtctgtctt tcctggca
498

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<210> 2684

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2684

1	5	10	15												
Ile	Leu	Met	Gly	Leu	Phe	Arg	Arg	Ser	Lys	His	Pro	Ala	Leu	Leu	Ser
20				25						30					
Val	Val	Ile	Phe	Val	Val	Phe	Leu	Met	Ala	Leu	Ser	Glu	Asn	Ala	Val
35				40				45							
Leu	Ile	Leu	Leu	Ile	His	Cys	Asp	Thr	Tyr	Leu	His	Thr	Pro	Met	Tyr
50				55				60							
Phe	Phe	Ile	Ser	Gln	Leu	Ser	Leu	Met	Asp	Met	Ala	Tyr	Ile	Ser	Val
65				70				75			80				
Thr	Val	Pro	Lys	Met	Leu	Leu	Asp	Gln	Val	Met	Gly	Val	Asn	Lys	Ile

	85	90	95
Ser Ala Pro Glu Cys Gly Met Gln Met Phe Leu Tyr Leu Thr Leu Ala			
100	105	110	
Gly Ser Glu Phe Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val			
115	120	125	
Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn His Arg Val			
130	135	140	
Cys Leu Phe Leu Ala			
145			

<210> 2685

<211> 391

<212> DNA

<213> Homo sapiens

<400> 2685

ngccggctgc acacgctgcc acctgggctg cctcgaaatg tccatgtgct gaaggtcaag
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cgcaatgagc tggctgcctt ggcacgaggg gcgctggcgg gcatggctca gcttcggaa
120
ctctacactca caggcaaccg actgcgaagc cgggcccctgg gccccctgc ctgggtggac
180
ctcgcccatc tgcatgttgc ggacatcgcc gggaatcagc tcacagagat cccggagggg
240
ctccccccat cgctggagta tctgtacctg cagaataaca agattagcgc ttttcctgcc
300
agcgcctttg actctactcc caacctaag gggatcttc tcaggttcaa caagctggat
360
gtgggctccg tagtagaaag cgccttccgg a
391

<210> 2686

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2686

Xaa Arg Leu His Thr Leu Pro Pro Gly Leu Pro Arg Asn Val His Val			
1	5	10	15
Leu Lys Val Lys Arg Asn Glu Leu Ala Ala Leu Ala Arg Gly Ala Leu			
20	25	30	
Ala Gly Met Ala Gln Leu Arg Glu Leu Tyr Leu Thr Gly Asn Arg Leu			
35	40	45	
Arg Ser Arg Ala Leu Gly Pro Arg Ala Trp Val Asp Leu Ala His Leu			
50	55	60	
Gln Leu Leu Asp Ile Ala Gly Asn Gln Leu Thr Glu Ile Pro Glu Gly			
65	70	75	80
Leu Pro Pro Ser Leu Glu Tyr Leu Tyr Leu Gln Asn Asn Lys Ile Ser			
85	90	95	
Ala Val Pro Ala Ser Ala Phe Asp Ser Thr Pro Asn Leu Lys Gly Ile			
100	105	110	
Phe Leu Arg Phe Asn Lys Leu Ala Val Gly Ser Val Val Glu Ser Ala			
115	120	125	
Phe Arg			

130

<210> 2687
<211> 399
<212> DNA
<213> Homo sapiens

<400> 2687
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caggaatggg agtgcaataa atctctaata caagagattg agcctcacca acctccagga
120
tggaaatga caggttaagac agggactaca aaagaccaag cagacaataa aattccccct
180
gacagtccgc taggccttat gttaagatac cgaaaagata atgaaaggac caaacacaag
240
aaaagacacgc aaatgataaa atattgtgg tttatggta ctaaggaacc catcctgaaa
300
ccttggtct tttggccaca gttagggttg agcggggact ggatatgcc aactcctaattc
360
cagtatgtaa aggataaaag tccagttct caagaggag
399

<210> 2688
<211> 91
<212> PRT
<213> Homo sapiens

<400> 2688
Met Thr Gly Lys Thr Gly Thr Thr Lys Asp Gln Ala Asp Asn Lys Ile
1 5 10 15
Pro Pro Asp Ser Pro Leu Gly Leu Met Leu Arg Tyr Arg Lys Asp Asn
20 25 30
Glu Arg Thr Lys His Lys Lys Arg Gln Gln Met Ile Lys Tyr Cys Trp
35 40 45
Phe Ile Trp Thr Lys Glu Pro Ile Leu Lys Pro Leu Val Phe Trp Pro
50 55 60
Gln Leu Gly Leu Ser Gly Asp Trp Ile Cys Gln Leu Leu Ile Gln Tyr
65 70 75 80
Val Lys Asp Lys Ser Pro Val Ser Gln Glu Glu
85 90

<210> 2689
<211> 560
<212> DNA
<213> Homo sapiens

<400> 2689
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60
gccctgttcc ctcataaaaat gtgggtctca ccaagttgcc caggctggtc
120
tcaaactcct ggctcaaga aatcctcctg gttcagcctc acaaagctcc gagattacag
180

ttgcatgtct gtgacaagct tggaggccga gttgcaagct aagatccaag agagccatcc
 240
 tgaattgcga cgcgtgtact tcaataaggg attgtaaagc agggaggaaaa cctctgcagc
 300
 tcattctgcc actgcaaagc tggtagcc atgctggta gaaaaatcct gttcaacctg
 360
 ggttggata tcgtcttga aaaacaatga ctataaaagc tacaggaaag gtatttcagg
 420
 acgtttattg aaggcattgg tggagcttc tgtatgttt ttgctctgca ggaaactcaa
 480
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 540
 gaaacaagcc atcacgccc
 560

<210> 2690
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 2690
 Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe Ala Thr
 1 5 10 15
 Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Arg Tyr Lys Asn Val Gly
 20 25 30
 Leu Thr Lys Leu Pro Arg Leu Val Ser Asn Ser Trp Pro Gln Glu Ile
 35 40 45
 Leu Leu Val Gln Pro His Lys Ala Pro Arg Leu Gln Leu His Val Cys
 50 55 60
 Asp Lys Leu Gly Gly Arg Val Ala Ser
 65 70

<210> 2691
 <211> 532
 <212> DNA
 <213> Homo sapiens

<400> 2691
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 60
 caggggggtgc tgaaggccct cgactacatc caccacatgg gatatgtaca caggagtgtc
 120
 aaagccagcc acatcctgat ctctgtggat gggaaaggct acctgtctgg tttgcgcagc
 180
 aacctcagca tgataagcca tggcagcgg cagcgagtgg tccacgattt tcccaagttac
 240
 agtgtcaagg ttctgccgtg gtcagcccc gaggtcctcc agcagaatct ccagggttat
 300
 gatgccaagt ctgacatcta cagtgtggga atcacagcct gtgaactggc caacggccat
 360
 gtcggccctta aggatatgcc tgccaccag atgctgttag agaaaactgaa cggcacagtg
 420
 ccctgcctgt tggataccag caccatcccc gctgaggagc tgaccatgag cccttcgcgc
 480

tcagtggcca actctggcct gagtgacagc ctgaccacca gcacaccccg gg
532

<210> 2692

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2692

Asp	Leu	Ile	Cys	Thr	His	Phe	Met	Asp	Gly	Met	Asn	Glu	Leu	Ala	Ile
1						5			10						15
Ala	Tyr	Ile	Leu	Gln	Gly	Val	Leu	Lys	Ala	Leu	Asp	Tyr	Ile	His	His
						20			25					30	
Met	Gly	Tyr	Val	His	Arg	Ser	Val	Lys	Ala	Ser	His	Ile	Leu	Ile	Ser
						35			40				45		
Val	Asp	Gly	Lys	Val	Tyr	Leu	Ser	Gly	Leu	Arg	Ser	Asn	Leu	Ser	Met
						50			55				60		
Ile	Ser	His	Gly	Gln	Arg	Gln	Arg	Val	Val	His	Asp	Phe	Pro	Lys	Tyr
						65			70			75		80	
Ser	Val	Lys	Val	Leu	Pro	Trp	Leu	Ser	Pro	Glu	Val	Leu	Gln	Gln	Asn
						85			90				95		
Leu	Gln	Gly	Tyr	Asp	Ala	Lys	Ser	Asp	Ile	Tyr	Ser	Val	Gly	Ile	Thr
						100			105				110		
Ala	Cys	Glu	Leu	Ala	Asn	Gly	His	Val	Pro	Phe	Lys	Asp	Met	Pro	Ala
						115			120				125		
Thr	Gln	Met	Leu	Leu	Glu	Lys	Leu	Asn	Gly	Thr	Val	Pro	Cys	Leu	Leu
						130			135				140		
Asp	Thr	Ser	Thr	Ile	Pro	Ala	Glu	Glu	Leu	Thr	Met	Ser	Pro	Ser	Arg
						145			150			155		160	
Ser	Val	Ala	Asn	Ser	Gly	Leu	Ser	Asp	Ser	Leu	Thr	Thr	Ser	Thr	Pro
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Arg															

<210> 2693

<211> 798

<212> DNA

<213> Homo sapiens

<400> 2693

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aagctgcagg	agttccctgt	ggccatccgg	accctggca	gactgcagga	actgggttc	180
cataacaaca	acatcaaggc	catcccagaa	aaggcttca	tggggAACCC	tctgtacag	240
acgatacact	tttatgataa	cccaatccag	tttgtggaa	gatcggcatt	ccagtacctg	300
cctaaactcc	acacactatac	tctgaatggt	gccatggaca	tccaggagtt	tccagatctc	360
aaaggcacca	ccagcctgga	gatcctgacc	ctgacccgcg	caggcatccg	gtgtccccca	420

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 540
 cgcacatctggg aaattggagc tgacacacctc agccagctga gctccctgca agccctggat
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 660
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 798

<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

Ala	Phe	Gln	Asn	Leu	Thr	Ser	Leu	Val	Val	Leu	His	Leu	His	Asn	Asn
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Arg	Ile	Gln	His	Leu	Gly	Thr	His	Ser	Phe	Glu	Gly	Leu	His	Asn	Leu
										25				30	
Glu	Thr	Leu	Asp	Leu	Asn	Tyr	Asn	Lys	Leu	Gln	Glu	Phe	Pro	Val	Ala
										35	40		45		
Ile	Arg	Thr	Leu	Gly	Arg	Leu	Gln	Glu	Leu	Gly	Phe	His	Asn	Asn	Asn
										50	55		60		
Ile	Lys	Ala	Ile	Pro	Glu	Lys	Ala	Phe	Met	Gly	Asn	Pro	Leu	Leu	Gln
										65	70		75		80
Thr	Ile	His	Phe	Tyr	Asp	Asn	Pro	Ile	Gln	Phe	Val	Gly	Arg	Ser	Ala
										85	90		95		
Phe	Gln	Tyr	Leu	Pro	Lys	Leu	His	Thr	Leu	Ser	Leu	Asn	Gly	Ala	Met
										100	105		110		
Asp	Ile	Gln	Glu	Phe	Pro	Asp	Leu	Lys	Gly	Thr	Thr	Ser	Leu	Glu	Ile
										115	120		125		
Leu	Thr	Leu	Thr	Arg	Ala	Gly	Ile	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys
										130	135		140		
Gln	Gln	Leu	Pro	Arg	Leu	Arg	Val	Leu	Glu	Leu	Ser	His	Asn	Gln	Ile
										145	150		155		160
Glu	Glu	Leu	Pro	Ser	Leu	His	Arg	Cys	Gln	Lys	Leu	Glu	Glu	Ile	Gly
										165	170		175		
Leu	Gln	His	Asn	Arg	Ile	Trp	Glu	Ile	Gly	Ala	Asp	Thr	Phe	Ser	Gln
										180	185		190		
Leu	Ser	Ser	Leu	Gln	Ala	Leu	Asp	Leu	Arg	Trp	Asn	Ala	Ile	Arg	Ser
										195	200		205		
Ile	His	Pro	Glu	Ala	Phe	Ser	Thr	Leu	His	Ser	Leu	Val	Lys	Leu	Asp
										210	215		220		
Leu	Thr	Asp	Asn	Gln	Leu	Thr	Leu	Pro	Leu	Ala	Gly	Leu	Gly	Gly	
										225	230		235		240
Leu	Met	His	Leu	Lys	Leu	Lys	Gly	Asn	Leu	Ala	Leu	Ser	Gln	Ala	Phe
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Ser	Lys	Asp	Ser	Phe	Pro	Lys	Leu	Arg	Ile						

260

265

<210> 2695
<211> 2265
<212> DNA
<213> Homo sapiens

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120
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180
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240
cctggggtag aggtgaccct gacgatgaaa gcggccagtg gtagcacagg cgaccagaag
300
gttcagattt catactacgg acccaagact ccaccagtca aagctctact ctacacctacc
360
gcgggtgaaaa tctccctgtg cgccagacatc acccgacccg gcaaagtgaa gccaaccaga
420
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480
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540
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600
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660
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1260
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1380

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 1560
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 1680
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 2160
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<210> 2696

<211> 663

<212> PRT

<213> Homo sapiens

<400> 2696

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Ala	Val	Cys	Val	Leu	Gly	Thr	Leu	Thr	Gln	Leu	Asp	Ile	Cys	Ser	Ser
														20	30
Ala	Pro	Glu	Asp	Cys	Thr	Ser	Phe	Ser	Ile	Asn	Ala	Ser	Pro	Gly	Val
														35	45
Val	Val	Asp	Ile	Ala	His	Ser	Pro	Pro	Ala	Lys	Lys	Lys	Ser	Thr	Gly
														50	60
Ser	Ser	Thr	Trp	Pro	Leu	Asp	Pro	Gly	Val	Glu	Val	Thr	Leu	Thr	Met
														65	80
Lys	Ala	Ala	Ser	Gly	Ser	Thr	Gly	Asp	Gln	Lys	Val	Gln	Ile	Ser	Tyr
														85	95
Tyr	Gly	Pro	Lys	Thr	Pro	Pro	Val	Lys	Ala	Leu	Leu	Tyr	Leu	Thr	Ala
														100	110
Val	Glu	Ile	Ser	Leu	Cys	Ala	Asp	Ile	Thr	Arg	Thr	Gly	Lys	Val	Lys
														115	125
Pro	Thr	Arg	Ala	Val	Lys	Asp	Gln	Arg	Thr	Trp	Thr	Trp	Gly	Pro	Cys

130	135	140
Gly Gln Gly Ala Ile Leu Leu Val Asn Cys Asp Arg Asp Asn Leu Glu		
145	150	155
Ser Ser Ala Met Asp Cys Glu Asp Asp Glu Val Leu Asp Ser Glu Asp		160
165	170	175
Leu Gln Asp Met Ser Leu Met Thr Leu Ser Thr Lys Thr Pro Lys Asp		
180	185	190
Phe Phe Thr Asn His Thr Leu Val Leu His Val Ala Arg Ser Glu Met		
195	200	205
Asp Lys Val Arg Val Phe Gln Ala Thr Arg Gly Lys Leu Ser Ser Lys		
210	215	220
Cys Ser Val Val Leu Gly Pro Lys Trp Pro Ser His Tyr Leu Met Val		
225	230	235
240		
Pro Gly Gly Lys His Asn Met Asp Phe Tyr Val Glu Ala Leu Ala Phe		
245	250	255
Pro Asp Thr Asp Phe Pro Gly Leu Ile Thr Leu Thr Ile Ser Leu Leu		
260	265	270
Asp Thr Ser Asn Leu Glu Leu Pro Glu Ala Val Val Phe Gln Asp Ser		
275	280	285
Val Val Phe Arg Val Ala Pro Trp Ile Met Thr Pro Asn Thr Gln Pro		
290	295	300
Pro Gln Glu Val Tyr Ala Cys Ser Ile Phe Glu Asn Glu Asp Phe Leu		
305	310	315
320		
Lys Ser Val Thr Thr Leu Ala Met Lys Ala Lys Cys Lys Leu Thr Ile		
325	330	335
Cys Pro Glu Glu Asn Met Asp Asp Gln Trp Met Gln Asp Glu Met		
340	345	350
Glu Ile Gly Tyr Ile Gln Ala Pro His Lys Thr Leu Pro Val Val Phe		
355	360	365
Asp Ser Pro Arg Asn Arg Gly Leu Lys Glu Phe Pro Ile Lys Arg Val		
370	375	380
Met Gly Pro Asp Phe Gly Tyr Val Thr Arg Gly Pro Gln Thr Gly Gly		
385	390	395
400		
Ile Ser Gly Leu Asp Ser Phe Gly Asn Leu Glu Val Ser Pro Pro Val		
405	410	415
Thr Val Arg Gly Lys Glu Tyr Pro Leu Gly Arg Ile Leu Phe Gly Asp		
420	425	430
Ser Cys Tyr Pro Ser Asn Asp Ser Arg Gln Met His Gln Ala Leu Gln		
435	440	445
Asp Phe Leu Ser Ala Gln Gln Val Gln Ala Pro Val Lys Leu Tyr Ser		
450	455	460
Asp Trp Leu Ser Val Gly His Val Asp Glu Phe Leu Ser Phe Val Pro		
465	470	475
480		
Ala Pro Asp Arg Lys Gly Phe Arg Leu Leu Leu Ala Ser Pro Arg Ser		
485	490	495
Cys Tyr Lys Leu Phe Gln Glu Gln Asn Glu Gly His Gly Glu Ala		
500	505	510
Leu Leu Phe Glu Gly Ile Lys Lys Lys Lys Gln Gln Lys Ile Lys Asn		
515	520	525
Ile Leu Ser Asn Lys Thr Leu Arg Glu His Asn Ser Phe Val Glu Arg		
530	535	540
Cys Ile Asp Trp Asn Arg Glu Leu Leu Lys Arg Glu Leu Gly Leu Ala		
545	550	555
560		
Glu Ser Asp Ile Ile Asp Ile Pro Gln Leu Phe Lys Leu Lys Glu Phe		

565	570	575
Ser Lys Ala Glu Ala Phe Phe Pro Asn Met Val Asn Met Leu Val Leu		
580	585	590
Gly Lys His Leu Gly Ile Pro Lys Pro Phe Gly Pro Val Ile Asn Gly		
595	600	605
Arg Cys Cys Leu Glu Glu Lys Val Cys Ser Leu Leu Glu Pro Leu Gly		
610	615	620
Leu Gln Cys Thr Phe Ile Asn Asp Phe Phe Thr Tyr His Ile Arg His		
625	630	635
Gly Glu Val His Cys Gly Thr Asn Val Arg Arg Lys Pro Phe Ser Phe		
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Lys Trp Trp Asn Met Val Pro		
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<210> 2697

<211> 2468

<212> DNA

<213> Homo sapiens

<400> 2697

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120
gtaaactgacc ccaggaacat tctgttaacc aacgaacaac tcgagagtgc gagaaaaata
180
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240
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300
ggaagaatgt cagcccaggt tcccatgaac atgaccatca caggttgat gatgacgtt
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480
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540
catgtctcac cactgatagg acgtttgtt ccctttgctg ccgttagctgc tgctaattgc
600
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660
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720
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900
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960
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1020

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<210> 2698
<211> 332
<212> PRT

<213> Homo sapiens

<400> 2698

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 35 40 45
 Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr
 50 55 60
 Arg Gln Gly Ile Val Pro Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg
 65 70 75 80
 Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys
 85 90 95
 Met Ile Leu Ile Gly Arg Met Ser Ala Gln Val Pro Met Asn Met Thr
 100 105 110
 Ile Thr Gly Cys Met Met Thr Phe Tyr Arg Thr Thr Pro Ala Val Leu
 115 120 125
 Phe Trp Gln Trp Ile Asn Gln Ser Phe Asn Ala Val Val Asn Tyr Thr
 130 135 140
 Asn Arg Ser Gly Asp Ala Pro Leu Thr Val Asn Glu Leu Gly Thr Ala
 145 150 155 160
 Tyr Val Ser Ala Thr Thr Gly Ala Val Ala Thr Ala Leu Gly Leu Asn
 165 170 175
 Ala Leu Thr Lys His Val Ser Pro Leu Ile Gly Arg Phe Val Pro Phe
 180 185 190
 Ala Ala Val Ala Ala Asn Cys Ile Asn Ile Pro Leu Met Arg Gln
 195 200 205
 Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg
 210 215 220
 Leu Gly Glu Ser Ala Asn Ala Ala Lys Gln Ala Ile Thr Gln Val Val
 225 230 235 240
 Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe
 245 250 255
 Ile Met Asn Thr Leu Glu Lys Lys Ala Phe Leu Lys Arg Phe Pro Trp
 260 265 270
 Met Ser Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe
 275 280 285
 Ala Thr Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Ser Ser Met Ser
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<210> 2699

<211> 974

<212> DNA

<213> Homo sapiens

<400> 2699

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 360
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 420
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 480
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 974

<210> 2700
 <211> 177
 <212> PRT
 <213> Homo sapiens

<400> 2700
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 Thr Gln Pro Ala Asp Val Leu Arg Trp Ser Ala Gly Tyr Phe Ser Ala
 35 40 45
 Leu Ser Arg Gly Asp Pro Leu Pro Val Lys Asp Arg Met Glu Met Pro
 50 55 60
 Val Ala Thr Gln Lys Thr Asp Thr Gly Leu Thr Gln Gly Leu Leu Lys
 65 70 75 80
 Val Leu His Lys Gln Cys His His Lys Arg Tyr Val Glu Leu Thr Asp
 85 90 95
 Leu Glu Gln Lys Trp Lys Asn Leu Cys Leu Pro Lys Glu Lys Phe Lys
 100 105 110
 Ala Leu Leu Gln Leu Asp Pro Cys Glu Asn Lys Ile Lys Trp Ile Asn

115	120	125
Phe Leu Ala Leu Gly Cys Ser Met Leu Gly Gly Ser Leu Asn Thr Ala		
130	135	140
Leu Lys His Leu Cys Glu Ile Leu Thr Asp Asp Pro Glu Ala Gly Pro		
145	150	155
Leu Ala Ser Pro Ser Arg Arg Phe Pro Thr Phe Thr Ala Thr Trp Pro		
165	170	175
Asp		

<210> 2701

<211> 646

<212> DNA

<213> Homo sapiens

<400> 2701

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<211> 92

<212> PRT

<213> Homo sapiens

<400> 2702

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Glu Arg Ile Ala Leu Phe Leu Gln Asn Glu Glu Phe Met Lys Glu Leu
   35          40          45
Gln Arg Asn Arg Asp Phe Leu Leu Ala Leu Glu Arg Asp Arg Leu Lys
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<212> DNA
<213> Homo sapiens

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843

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<211> 251
<212> PRT
<213> Homo sapiens

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35 40 45
Ala Ser Arg Asn Ile Val Gln Asn Tyr Arg Ala Gly Val Val Thr Pro
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Gly Ile Thr Glu Asp Gln Leu Trp Arg Ala Lys Tyr Val Tyr Asp Ser
65 70 75 80
Ala Phe His Pro Asp Thr Gly Glu Lys Val Val Leu Ile Gly Arg Met

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Phe Tyr Arg Lys Thr Pro Thr Val Val Phe Trp Gln Trp Val Asn Gln		
115	120	125
Ser Phe Asn Ala Ile Val Asn Tyr Ser Asn Arg Ser Gly Asp Thr Pro		
130	135	140
Ile Thr Val Arg Gln Leu Gly Thr Ala Tyr Val Ser Ala Thr Thr Gly		
145	150	155
Ala Val Ala Thr Ala Leu Gly Leu Lys Ser Leu Thr Lys His Leu Pro		
165	170	175
Pro Leu Val Gly Arg Phe Val Pro Phe Ala Ala Val Ala Ala Asn		
180	185	190
Cys Ile Asn Ile Pro Leu Met Arg Gln Arg Glu Leu Gln Val Gly Ile		
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Pro Val Thr Asp Glu Ala Gly Gln Arg Leu Gly His Ser Val Thr Ala		
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<210> 2707

<211> 2921

<212> DNA

<213> Homo sapiens

<400> 2707

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780

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 <212> PRT
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 50 55 60
 Leu Thr Gln Pro Thr Tyr Thr Gly Ala Ile Ile Ser Ile Cys Cys Cys
 65 70 75 80
 Leu Phe Ile Leu Phe Leu Ser Glu Leu Thr Gly Phe Ile Thr
 85 90 95
 Thr Glu Val Val Asn Glu Leu Tyr Val Asp Asp Pro Asp Lys Asp Ser
 100 105 110
 Gly Gly Lys Ile Asp Val Ser Leu Asn Ile Ser Leu Pro Asn Leu His
 115 120 125
 Cys Glu Leu Val Gly Leu Asp Ile Gln Asp Glu Met Gly Arg His Glu
 130 135 140
 Val Gly His Ile Asp Asn Ser Met Lys Ile Pro Leu Asn Asn Gly Ala
 145 150 155 160
 Gly Cys Arg Phe Glu Gly Gln Phe Ser Ile Asn Lys Val Pro Gly Asn
 165 170 175
 Phe His Val Ser Thr His Ser Ala Thr Ala Gln Pro Gln Asn Pro Asp
 180 185 190
 Met Thr His Val Ile His Lys Leu Ser Phe Gly Asp Thr Leu Gln Val
 195 200 205
 Gln Asn Ile His Gly Ala Phe Asn Ala Leu Gly Gly Ala Asp Arg Leu
 210 215 220
 Thr Ser Asn Pro Leu Ala Ser His Asp Tyr Ile Leu Lys Ile Val Pro

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Thr Val Ala Asn Lys Glu Tyr Val Ala Tyr Ser His Thr Gly Arg Ile			
260	265	270	
Ile Pro Ala Ile Trp Phe Arg Tyr Asp Leu Ser Pro Ile Thr Val Lys			
275	280	285	
Tyr Thr Glu Arg Arg Gln Pro Leu Tyr Arg Phe Ile Thr Thr Ile Cys			
290	295	300	
Ala Ile Ile Gly Gly Thr Phe Thr Val Ala Gly Ile Leu Asp Ser Cys			
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<211> 984

<212> DNA

<213> Homo sapiens

<400> 2709

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Ala Ser Gly Gln Ala Lys Ser Ser Ser Lys Glu Ser Lys Asp Ser Lys
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Thr Ser Ser Lys Asp Asp Lys Gly Ser Thr Ser Ser Thr Ser Gly Ser
65 70 75 80
Ser Gly Ser Ser Thr Lys Asn Ile Trp Val Ser Gly Leu Ser Ser Asn
85 90 95
Thr Lys Ala Ala Asp Leu Lys Asn Leu Phe Gly Lys Tyr Gly Lys Val
100 105 110
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115 120 125
Tyr Gly Ile Val Thr Met Ser Ser Ser Thr Glu Val Ser Arg Cys Ile
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Ala His Leu His Arg Thr Glu Leu His Gly Gln Leu Ile Ser Val Glu
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Glu Lys Ser Ser Arg Ser Ser Gly Asp Lys Lys Asn Thr Ser Asp
180 185 190
Arg Ser Ser Lys Thr Gln Ala Ser Val Lys Lys Glu Glu Lys Arg Ser
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<211> 2096

<212> PRT

<213> Homo sapiens

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 Glu Glu Val Ala Pro Val Leu Gln Gln Thr Leu Leu Gln Asp Asn Leu
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 Leu Gly Arg Val His Phe Asp Gln Phe Lys Glu Ala Leu Ile Leu Ile
 65 70 75 80
 Leu Ser Arg Thr Leu Ser Asp Glu Glu His Phe Gln Glu Pro Asp Cys
 85 90 95
 Ser Leu Glu Ala Gln Pro Arg Tyr Val Arg Gly Glu Lys Pro Tyr Gly
 100 105 110
 Arg Arg Ser Leu Pro Glu Phe Gln Glu Ser Val Glu Glu Phe Pro Glu
 115 120 125
 Val Thr Val Ile Glu Pro Leu Asp Glu Glu Ala Arg Pro Ser His Ile
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 Pro Ala Gly Asp Cys Ser Glu His Trp Lys Thr Gln Arg Ser Glu Glu
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 Tyr Glu Ala Glu Gly Gln Leu Arg Phe Trp Asn Pro Asp Asp Leu Asn
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 Ala Ser Gln Ser Gly Ser Ser Pro Pro Gln Asp Trp Ile Glu Glu Lys
 180 185 190
 Leu Gln Gln Val Cys Glu Asp Leu Gly Ile Thr Pro Asp Gly His Leu
 195 200 205
 Asn Arg Lys Lys Leu Val Ser Ile Cys Glu Gln Tyr Gly Leu Gln Asn
 210 215 220
 Val Asp Gly Glu Met Leu Glu Glu Val Phe His Asn Leu Asp Pro Asp
 225 230 235 240
 Gly Thr Met Ser Val Glu Asp Phe Phe Tyr Gly Leu Phe Lys Asn Gly
 245 250 255
 Lys Ser Leu Thr Pro Ser Ala Ser Thr Pro Tyr Arg Gln Leu Lys Arg
 260 265 270
 His Leu Ser Met Gln Ser Phe Asp Glu Ser Gly Arg Arg Thr Thr Thr
 275 280 285
 Ser Ser Ala Thr Thr Ser Thr Ile Gly Phe Arg Val Phe Ser Cys Leu
 290 295 300
 Asp Asp Gly Met Gly His Ala Ser Val Glu Arg Ile Leu Asp Thr Trp
 305 310 315 320
 Gln Glu Glu Gly Ile Glu Asn Ser Gln Glu Ile Leu Lys Ala Leu Asp
 325 330 335
 Phe Ser Leu Asp Gly Asn Ile Asn Leu Thr Glu Leu Thr Leu Ala Leu
 340 345 350
 Glu Asn Glu Leu Leu Val Thr Lys Asn Ser Ile His Gln Ala Ala Leu
 355 360 365
 Ala Ser Phe Lys Ala Glu Ile Arg His Leu Leu Glu Arg Val Asp Gln
 370 375 380
 Val Val Arg Glu Lys Arg Ser Tyr Gly Arg Ile Trp Thr Ala Glu Lys
 385 390 395 400
 Leu Lys Ser Leu Met Ala Ser Glu Val Asp Asp His Asp Ala Ala Ile

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Glu Arg Ile Ala Ala Leu Lys Asn Glu Leu Arg Lys Glu Arg Glu Gln			
435	440	445	
Ile Leu Gln Gln Ala Gly Lys Gln Arg Leu Glu Leu Glu Gln Glu Ile			
450	455	460	
Glu Lys Ala Lys Thr Glu Glu Asn Tyr Ile Arg Asp Arg Leu Ala Leu			
465	470	475	480
Ser Leu Lys Glu Asn Ser Arg Leu Glu Asn Glu Leu Leu Glu Asn Ala			
485	490	495	
Glu Lys Leu Ala Glu Tyr Glu Asn Leu Thr Asn Lys Leu Gln Arg Asn			
500	505	510	
Leu Glu Asn Val Leu Ala Glu Lys Phe Gly Asp Leu Asp Pro Ser Ser			
515	520	525	
Ala Glu Phe Phe Leu Gln Glu Glu Arg Leu Thr Gln Met Arg Asn Glu			
530	535	540	
Tyr Glu Arg Gln Cys Arg Val Leu Gln Asp Gln Val Asp Glu Leu Gln			
545	550	555	560
Ser Glu Leu Glu Glu Tyr Arg Ala Gln Gly Arg Val Leu Arg Leu Pro			
565	570	575	
Leu Lys Asn Ser Pro Ser Glu Glu Val Glu Ala Asn Ser Gly Gly Ile			
580	585	590	
Glu Pro Glu His Gly Leu Gly Ser Glu Glu Cys Asn Pro Leu Asn Met			
595	600	605	
Ser Ile Glu Ala Glu Leu Val Ile Glu Gln Met Lys Glu Gln His His			
610	615	620	
Arg Asp Ile Cys Cys Leu Arg Leu Glu Leu Glu Asp Lys Val Arg His			
625	630	635	640
Tyr Glu Lys Gln Leu Asp Glu Thr Val Val Ser Cys Lys Lys Ala Gln			
645	650	655	
Glu Asn Met Lys Gln Arg His Glu Asn Glu Thr His Thr Leu Glu Glu			
660	665	670	
Gln Ile Ser Asp Leu Lys Met Lys Ile Ala Glu Leu Gln Gly Gln Ala			
675	680	685	
Ala Val Leu Lys Glu Ala His His Glu Ala Thr Cys Arg His Glu Glu			
690	695	700	
Glu Lys Lys Gln Leu Gln Val Lys Leu Glu Glu Lys Thr His Leu			
705	710	715	720
Gln Glu Lys Leu Arg Leu Gln His Glu Met Glu Leu Lys Ala Arg Leu			
725	730	735	
Thr Gln Ala Gln Ala Ser Phe Gly Arg Glu Arg Glu Gly Leu Gln Ser			
740	745	750	
Ser Ala Trp Thr Glu Glu Lys Val Arg Gly Leu Thr Gln Glu Leu Glu			
755	760	765	
Gln Phe His Gln Glu Gln Leu Thr Ser Leu Val Glu Lys His Thr Leu			
770	775	780	
Glu Lys Glu Glu Leu Arg Lys Glu Leu Leu Glu Lys His Gln Arg Glu			
785	790	795	800
Leu Gln Glu Gly Arg Glu Lys Met Glu Thr Glu Cys Asn Arg Arg Thr			
805	810	815	
Ser Gln Ile Glu Ala Gln Phe Gln Ser Asp Cys Gln Lys Val Thr Glu			
820	825	830	
Arg Cys Glu Ser Ala Leu Gln Ser Leu Glu Gly Arg Tyr Arg Gln Glu			

835	840	845
Leu Lys Asp Leu Gln Glu Gln Gln Arg Glu Glu Lys Ser Gln Trp Glu		
850	855	860
Phe Glu Lys Asp Glu Leu Thr Gln Glu Cys Ala Glu Ala Gln Glu Leu		
870	875	880
Leu Lys Glu Thr Leu Lys Arg Glu Lys Thr Thr Ser Leu Val Leu Thr		
885	890	895
Gln Glu Arg Glu Met Leu Glu Lys Thr Tyr Lys Asp His Leu Asn Ser		
900	905	910
Met Val Val Glu Arg Gln Gln Leu Leu Gln Asp Leu Glu Asp Leu Arg		
915	920	925
Asn Val Ser Glu Thr Gln Gln Ser Leu Leu Ser Asp Gln Ile Leu Glu		
930	935	940
Leu Lys Ser Ser His Lys Arg Glu Leu Arg Glu Arg Glu Glu Val Leu		
945	950	955
Cys Gln Gln Gly Val Ser Glu Gln Leu Ala Ser Gln Arg Leu Glu Arg		
965	970	975
Leu Glu Met Glu His Asp Gln Glu Arg Gln Glu Met Met Ser Lys Leu		
980	985	990
Leu Ala Met Glu Asn Ile His Lys Ala Thr Cys Glu Thr Ala Asp Arg		
995	1000	1005
Glu Arg Ala Glu Met Ser Thr Glu Ile Ser Arg Leu Gln Ser Lys Ile		
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Lys Glu Met Gln Gln Ala Thr Ser Pro Leu Ser Met Leu Gln Ser Gly		
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Cys Gln Val Ile Gly Glu Glu Glu Val Glu Gly Asp Gly Ala Leu Ser		
1045	1050	1055
Leu Leu Gln Lys Gly Glu Gln Leu Leu Glu Glu Asn Gly Asp Val Leu		
1060	1065	1070
Leu Ser Leu Gln Arg Ala His Glu Gln Ala Val Lys Glu Asn Val Lys		
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Met Ala Thr Glu Ile Ser Arg Leu Gln Gln Arg Leu Gln Lys Leu Glu		
1090	1095	1100
Pro Gly Leu Val Met Ser Ser Cys Leu Asp Glu Pro Ala Thr Glu Phe		
1105	1110	1115
Phe Gly Asn Thr Ala Glu Gln Thr Glu Pro Phe Leu Gln Gln Asn Arg		
1125	1130	1135
Thr Lys Gln Val Glu Gly Val Thr Arg Arg His Val Leu Ser Asp Leu		
1140	1145	1150
Glu Asp Asp Glu Val Arg Asp Leu Gly Ser Thr Gly Thr Ser Ser Val		
1155	1160	1165
Gln Arg Gln Glu Val Lys Ile Glu Glu Ser Glu Ala Ser Val Glu Gly		
1170	1175	1180
Phe Ser Glu Leu Glu Asn Ser Glu Glu Thr Arg Thr Glu Ser Trp Glu		
1185	1190	1195
Leu Lys Asn His Ile Ser Leu Leu Gln Glu Gln Leu Met Met Phe Cys		
1205	1210	1215
Ala Asp Cys Asp Leu Ala Ser Glu Lys Lys Gln Glu Leu Leu Phe Asp		
1220	1225	1230
Val Ser Val Leu Lys Lys Leu Lys Ile Leu Glu Arg Ile Pro Glu		
1235	1240	1245
Ala Ser Pro Arg Tyr Lys Leu Leu Tyr Glu Asp Val Ser Arg Glu Asn		
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Asp Cys Leu Gln Glu Glu Leu Glu Met Met Glu Thr Arg Tyr Asp Glu		

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1300	1305	1310	
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1315	1320	1325	
Leu Val Leu Arg Leu Gln Gly Lys Ile Glu Lys Leu Xaa Thr Arg Ala			
1330	1335	1340	
Trp Ser Ser Gly Val Thr Ala Ala Tyr Gly Lys Xaa Ser Leu Glu Asn			
1345	1350	1355	1360
Leu Glu Ile Glu Pro Asp Gly Asn Ile Leu Gln Leu Asn Gln Thr Leu			
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Glu Glu Cys Val Pro Arg Val Arg Ser Val His His Val Ile Glu Glu			
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1425	1430	1435	1440
Thr Thr Leu Leu Gly Phe Gln Asp Lys His Phe Gln His Gln Ala Thr			
1445	1450	1455	
Ile Ala Glu Leu Glu Leu Glu Lys Thr Lys Leu Gln Glu Leu Thr Arg			
1460	1465	1470	
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1505	1510	1515	1520
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1525	1530	1535	
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1570	1575	1580	
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1635	1640	1645	
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1650	1655	1660	
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1730	1735	1740	
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1795	1800	1805	
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1810	1815	1820	
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1825	1830	1835	1840
Arg Leu Ser Trp Asp Lys Leu Asp His Leu Met Asn Glu Glu Gln Gln			
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Leu Leu Trp Gln Glu Asn Glu Arg Leu Gln Thr Met Val Gln Asn Thr			
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Lys Ala Glu Leu Thr His Ser Arg Glu Lys Val Arg Gln Leu Glu Ser			
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Asn Leu Leu Pro Lys His Gln Lys His Leu Asn Pro Ser Gly Thr Met			
1890	1895	1900	
Asn Pro Thr Glu Gln Glu Lys Leu Ser Leu Lys Arg Glu Cys Asp Gln			
1905	1910	1915	1920
Phe Gln Lys Glu Gln Ser Pro Ala Asn Arg Lys Val Ser Gln Met Asn			
1925	1930	1935	
Ser Leu Glu Gln Glu Leu Glu Thr Ile His Leu Glu Asn Glu Gly Leu			
1940	1945	1950	
Lys Lys Lys Gln Val Lys Leu Asp Glu Gln Leu Met Glu Met Gln His			
1955	1960	1965	
Leu Arg Ser Thr Ala Thr Pro Ser Pro Ser Pro His Ala Trp Asp Leu			
1970	1975	1980	
Gln Leu Leu Gln Gln Ala Cys Pro Met Val Pro Arg Glu Gln Phe			
1985	1990	1995	2000
Leu Gln Leu Gln Arg Gln Leu Leu Gln Ala Glu Arg Ile Asn Gln His			
2005	2010	2015	
Leu Gln Glu Glu Leu Glu Asn Arg Thr Ser Glu Thr Asn Thr Pro Gln			
2020	2025	2030	
Gly Asn Gln Glu Gln Leu Val Thr Val Met Glu Glu Arg Met Ile Glu			
2035	2040	2045	
Val Glu Gln Lys Leu Lys Leu Val Lys Arg Leu Leu Gln Glu Lys Val			
2050	2055	2060	
Asn Gln Leu Lys Glu Gln Val Ser Leu Pro Gly His Leu Cys Ser Pro			
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1260 1320 acaacaaaat ttaagaatga ctatgggc gggctggctc ttttgcagct tgtgatttct
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 1860
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 2040
 aaaaaaaaaa aaaaaaaaaa aaaaaa
 2066

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 <211> 214
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 Leu Val Glu Thr Ser Gly Ile Ser Ile Tyr Arg Leu Leu Asp Lys Lys
 35 40 45
 Thr Gly Leu Tyr Glu Tyr Lys Val Phe Gly Val Leu Glu Asp Cys Ser
 50 55 60
 Pro Thr Leu Leu Ala Asp Ile Tyr Met Asp Ser Asp Tyr Arg Lys Gln
 65 70 75 80
 Trp Asp Gln Tyr Val Lys Glu Leu Tyr Glu Gln Glu Cys Asn Gly Glu
 85 90 95
 Thr Val Val Tyr Trp Glu Val Lys Tyr Pro Phe Pro Met Ser Asn Arg
 100 105 110
 Asp Tyr Val Tyr Leu Arg Gln Arg Arg Asp Leu Asp Met Glu Gly Arg
 115 120 125
 Lys Ile His Val Ile Leu Ala Arg Ser Thr Ser Met Pro Gln Leu Gly
 130 135 140
 Glu Arg Ser Gly Val Ile Arg Val Lys Gln Tyr Lys Gln Ser Leu Ala
 145 150 155 160
 Ile Glu Ser Asp Gly Lys Lys Gly Ser Lys Val Phe Met Tyr Tyr Phe
 165 170 175
 Asp Asn Pro Gly Gly Gln Ile Pro Ser Trp Leu Ile Asn Trp Ala Ala
 180 185 190
 Lys Asn Gly Val Pro Asn Phe Leu Lys Asp Met Ala Arg Ala Cys Gln
 195 200 205
 Asn Tyr Leu Lys Lys Thr
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<210> 2715
 <211> 378
 <212> DNA
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 atcatgcac attttattcc agatttgctc tttgccaaa gaggtgatct ctcagatgtg
 120
 gaggaagagg aagaagaaga gatggatgta gatgaagcca cagggcagt taagaagcac
 180
 aatggtgtt gaggcagtcc ccctaagtcc aagttactgt ttagtaacac agcagctcaa
 240
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 360
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 <211> 126
 <212> PRT
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 Lys Ile Lys Gln Ile Met His His Phe Ile Pro Asp Leu Leu Phe Ala
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 Gln Arg Gly Asp Leu Ser Asp Val Glu Glu Glu Glu Glu Met
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 Asp Val Asp Glu Ala Thr Gly Ala Val Lys Lys His Asn Gly Val Gly
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 Gly Ser Pro Pro Lys Ser Lys Leu Leu Phe Ser Asn Thr Ala Ala Gln
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 Lys Leu Arg Gly Met Asp Glu Val Tyr Asn Leu Phe Tyr Val Asn Asn
 85 90 95
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 <211> 2076
 <212> DNA
 <213> Homo sapiens

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 35 40 45
 Thr Thr Gly Glu Gly Ala Gly His Arg Pro Leu Thr Ile Leu His Pro
 50 55 60
 Lys Thr Gly Gly Gln Gly Ser Asp Ala Thr Leu Leu Phe Val Lys Tyr
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 <213> Homo sapiens

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 35 40 45
 Leu Asp Val Pro Leu Glu Gln Glu Met Ala Lys Glu Asp Pro Val Cys
 50 55 60
 Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met Leu Tyr Thr
 65 70 75 80
 Ser Gly Ser Thr Gly Met Pro Lys Gly Ile Val His Thr Gln Ala Gly
 85 90 95
 Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys Leu Val Phe Asp His Gln
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 Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp Ile Thr Gly
 115 120 125
 His Ser Tyr Val Val Tyr Gly Pro Leu Cys Asn Gly Ala Thr Ser Val
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 Leu Phe Glu Ser Thr Pro Val Tyr Pro Asn Ala Gly Arg Tyr Trp Glu
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<210> 2721
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<211> 508

<212> PRT

<213> Homo sapiens

<400> 2722

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Tyr	Gly	Gln	Thr	His	Tyr	Tyr	His	Gln	Arg	Gln	Asn	Ser	Asp	Asp	Lys
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Ser	Asn	Trp	Gln	Asp	Lys	Ser	Met	Gly	Cys	Glu	Asn	Gly	His	Val	Pro
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His	Lys	Ile	Val	Ile	Ser	Ile	Gln	Lys	Leu	Lys	Glu	Arg	Gln	Asn	Leu
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Ala Ser Gly Gly Leu Gln Pro His	Gln Leu Ser Ser	Cys Asp Gly Glu
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Arg Val Met Gly Lys Val Cys Thr	Gln Leu Leu Val	Ser Arg Pro Asp
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Gln Gln Val Gln Lys Leu Phe Arg	Ser Phe Pro Arg	Lys Thr Leu Leu
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415	420	425
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445	450	455
Ser Val Gln Arg Thr Arg Ser	Leu Pro Val His	Thr Ser Pro Gln Asn
460	465	470
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<211> 1221

<212> DNA

<213> Homo sapiens

<400> 2723

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 1020
 aagtatgtgg ctgaagccct ggagtgcctg gacgacttca aaggaaatt tccggagcag
 1080
 gcccacagca ggcgttgta tgcattgggc cgcgacatca cagctgcctt cttctctaaa
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 1200
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 1221

<210> 2724

<211> 404

<212> PRT

<213> Homo sapiens

<400> 2724

Gly	Ala	Ala	Asp	Ser	Lys	Val	His	Val	His	Asp	Leu	Thr	Val	Lys	Glu
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														15	
Thr	Ile	His	Met	Phe	Gly	Asp	His	Thr	Asn	Arg	Val	Lys	Arg	Ile	Ala
														30	
Thr	Ala	Pro	Met	Trp	Pro	Asn	Thr	Phe	Trp	Ser	Ala	Ala	Glu	Asp	Gly
														45	
Leu	Ile	Arg	Gln	Tyr	Asp	Leu	Arg	Glu	Asn	Ser	Lys	His	Ser	Glu	Val
														50	
Leu	Ile	Asp	Leu	Thr	Glu	Tyr	Cys	Gly	Gln	Leu	Val	Glu	Ala	Lys	Cys

65	70	75	80
Leu Thr Val Asn Pro Gln Asp Asn Asn Cys		Leu Ala Val Gly Ala Ser	
85		90	95
Gly Pro Phe Val Arg Leu Tyr Asp Ile Arg Met Ile His Asn His Arg			
100	105		110
Lys Ser Met Lys Gln Ser Pro Ser Ala Gly Val His Thr Phe Cys Asp			
115	120	125	
Arg Gln Lys Pro Leu Pro Asp Gly Ala Ala Gln Tyr Tyr Val Ala Gly			
130	135	140	
His Leu Pro Val Lys Leu Pro Asp Tyr Asn Asn Arg Leu Arg Val Leu			
145	150	155	160
Val Ala Thr Tyr Val Thr Phe Ser Pro Asn Gly Thr Glu Leu Leu Val			
165	170	175	
Asn Met Gly Gly Glu Gln Val Tyr Leu Phe Asp Leu Thr Tyr Lys Gln			
180	185	190	
Arg Pro Tyr Thr Phe Leu Leu Pro Arg Lys Cys His Ser Ser Gly Glu			
195	200	205	
Val Gln Asn Gly Lys Met Ser Thr Asn Gly Val Ser Asn Gly Val Ser			
210	215	220	
Asn Gly Leu His Leu His Ser Asn Gly Phe Arg Leu Pro Glu Ser Arg			
225	230	235	240
Gly His Val Ser Pro Gln Val Glu Leu Pro Pro Tyr Leu Glu Arg Val			
245	250	255	
Lys Gln Gln Ala Asn Glu Ala Phe Ala Cys Gln Gln Trp Thr Gln Ala			
260	265	270	
Ile Gln Leu Tyr Ser Lys Ala Val Gln Arg Ala Pro His Asn Ala Met			
275	280	285	
Leu Tyr Gly Asn Arg Ala Ala Ala Tyr Met Lys Arg Lys Trp Asp Gly			
290	295	300	
Asp His Tyr Asp Ala Leu Arg Asp Cys Leu Lys Ala Ile Ser Leu Asn			
305	310	315	320
Pro Cys His Leu Lys Ala His Phe Arg Leu Ala Arg Cys Leu Phe Glu			
325	330	335	
Leu Lys Tyr Val Ala Glu Ala Leu Glu Cys Leu Asp Asp Phe Lys Gly			
340	345	350	
Lys Phe Pro Glu Gln Ala His Ser Ser Ala Cys Asp Ala Leu Gly Arg			
355	360	365	
Asp Ile Thr Ala Ala Leu Phe Ser Lys Asn Asp Gly Glu Glu Lys Lys			
370	375	380	
Gly Pro Gly Gly Gly Ala Pro Val Arg Leu Arg Ser Thr Ser Arg Lys			
385	390	395	400
Gly Cys Thr Arg			

<210> 2725

<211> 856

<212> DNA

<213> Homo sapiens

<400> 2725

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ctgaccggcg cgccccctgcc cgccccctccc tccagcatca tggccagccc aagaaccagg

120

aaggttctta aagaagtcag ggtgcaggat gagaacaacg tttgtttga gtgtggcg
 180
 ttcaatcctc agtgggtcag tgtgacctac ggcacatctgga tctgcctgga gtgctcg
 240
 agacaccgcg ggcttgggt tcacccctcagc tttgtgcgcct ctgttactat ggacaagtgg
 300
 aaggacattg agcttgagaa gatgaaagct ggtggaaatg ctaagttccg agagttcctg
 360
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 420
 gcggccctct ttagggataa ggtggtcgcct ctggccgaag gcagagagtg gtctctggag
 480
 tcatcacctg cccagaactg gacccaccc cagcccaggga cgctgccgtc catggtcac
 540
 cggtagctgc tcctcgtgg gccttagtac agttccact gggtcctgaa cttagtagat
 600
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 660
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 720
 acccatagag ctgtctcaga tagcgcccca ggtaagctcc gcacgccttc caggtgtgca
 780
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 840
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 856

<210> 2726

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2726
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 Asp Glu Asn Asn Val Cys Phe Glu Cys Gly Ala Phe Asn Pro Gln Trp
 20 25 30
 Val Ser Val Thr Tyr Gly Ile Trp Ile Cys Leu Glu Cys Ser Gly Arg
 35 40 45
 His Arg Gly Leu Gly Val His Leu Ser Phe Val Arg Ser Val Thr Met
 50 55 60
 Asp Lys Trp Lys Asp Ile Glu Leu Glu Lys Met Lys Ala Gly Gly Asn
 65 70 75 80
 Ala Lys Phe Arg Glu Phe Leu Glu Ser Gln Glu Asp Tyr Asp Pro Cys
 85 90 95
 Trp Ser Leu Gln Glu Lys Tyr Asn Ser Arg Ala Ala Leu Phe Arg
 100 105 110
 Asp Lys Val Val Ala Leu Ala Glu Gly Arg Glu Trp Ser Leu Glu Ser
 115 120 125
 Ser Pro Ala Gln Asn Trp Thr Pro Pro Gln Pro Arg Thr Leu Pro Ser
 130 135 140
 Met Val His Arg
 145

<210> 2727

<211> 1119

<212> DNA

<213> Homo sapiens

<400> 2727

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 aaaaaataat caagtacatg gcattaagtt aaatgtctct gcacatgaat ttccacacctt
 120
 taaatctggt atattaaatt gtgctgtaaa tagatttgta tattttcttt tttgagttact
 180
 atgataggtg aaatggatgt actataaaaa ggatttggttt ctttttgtct cctggaatga
 240
 catgatgcct ttcttagagaa agaaaaattt caggctacag gaaaatgata aaaactactg
 300
 gattcattt aactattcga ttttaggaagg tacaaccact tctttaacat caagctaaaa
 360
 gtggggaaaa gtctcagtct cccaggtagg tctcctctca cactgtcctg ggtggcaggc
 420
 gctgtttata catgcccgtt atcgctctgg ctgcactgtt gatcatctgc cgacgggaca
 480
 tcccagtaaa tgccatgtgc caatcagtcc ggctgacatt cagtaaactc ttttccagga
 540
 cttcacccac tgcacccatc aggcctgacc acctcagatt atagtcctgg ggagtttagac
 600
 tttgagcctg ctgtacaaat tccaaaggca ctgggtggc ttgtgtaaat gtttcttagat
 660
 gaatgccatg gacaggatct tcaaccacca aacaaccaat gtcaaaccat ttgtcaggca
 720
 gcaattctgc aatgaagttt tctactgaca cagctgtctg ttttcatgg atcacccccag
 780
 ttcgacgcaa gctatctatc cgttcctgag caccttttaa tccagctgca tagcccactg
 840
 gttgtgggc aatattggac tgcctcggcct cccctacaac cacagctagg ccgaagacct
 900
 cctggaaaggc atctcggaca gcagccactt tcacttcttt atttgaggtc actacaatat
 960
 ccagttcacc tccagattt atataggag ccatgccagg gtccagcggtt gtaatcatgc
 1020
 tttctactga atgttttgc ttatcaagca cagacttcac cataggattc ccagccacac
 1080
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 1119

<210> 2728

<211> 221

<212> PRT

<213> Homo sapiens

<400> 2728

Met	Val	Lys	Ser	Val	Leu	Asp	Lys	Thr	Lys	His	Ser	Val	Glu	Ser	Met
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Ile	Thr	Thr	Leu	Asp	Pro	Gly	Met	Ala	Pro	Tyr	Ile	Lys	Ser	Gly	Gly

20	25	30													
Glu	Leu	Asp	Ile	Val	Val	Thr	Ser	Asn	Lys	Glu	Val	Lys	Val	Ala	Ala
35						40						45			
Val	Arg	Asp	Ala	Phe	Gln	Glu	Val	Phe	Gly	Leu	Ala	Val	Val	Val	Gly
50						55					60				
Glu	Ala	Gly	Gln	Ser	Asn	Ile	Ala	Pro	Gln	Pro	Val	Gly	Tyr	Ala	Ala
65						70				75			80		
Gly	Leu	Lys	Gly	Ala	Gln	Glu	Arg	Ile	Asp	Ser	Leu	Arg	Arg	Thr	Gly
85							90					95			
Val	Ile	His	Glu	Lys	Gln	Thr	Ala	Val	Ser	Val	Glu	Asn	Phe	Ile	Ala
100							105					110			
Glu	Leu	Leu	Pro	Asp	Lys	Trp	Phe	Asp	Ile	Gly	Cys	Leu	Val	Val	Glu
115							120					125			
Asp	Pro	Val	His	Gly	Ile	His	Leu	Glu	Thr	Phe	Thr	Gln	Ala	Thr	Pro
130							135					140			
Val	Pro	Leu	Glu	Phe	Val	Gln	Gln	Ala	Gln	Ser	Leu	Thr	Pro	Gln	Asp
145						150					155			160	
Tyr	Asn	Leu	Arg	Trp	Ser	Gly	Leu	Leu	Val	Thr	Val	Gly	Glu	Val	Leu
165							170					175			
Glu	Lys	Ser	Leu	Leu	Asn	Val	Ser	Arg	Thr	Asp	Trp	His	Met	Ala	Phe
180							185					190			
Thr	Gly	Met	Ser	Arg	Arg	Gln	Met	Ile	Tyr	Ser	Ala	Ala	Arg	Ala	Ile
195							200					205			
Ala	Gly	Met	Tyr	Lys	Gln	Arg	Leu	Pro	Pro	Arg	Thr	Val			
210							215					220			

<210> 2729

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2729

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120agctgctctg ccacgagatc ttctgagaag cacgtgaatt ctgctgactc tccaccctcc
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240gagccccctc acttcccctg cttacagaaa ctgctggatt atctcacacg gatgatgccg
300ggctctgacc cagaaaagaag agcacaaaaat cttcttgagc agtttcagaa gcaagaagtg
360

gaaactgaca atgggcttcc caaacacgatc tcc

393

<210> 2730

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2730

Val Ser Cys Ser Ala Thr Arg Ser Ser Glu Lys His Val Asn Ser Ala

1	5	10	15
Asp Ser Pro Pro Ser Ser Ser Ser Ser Ser Ile Leu Arg Ala Trp			
20	25	30	
Leu Asp Gln Cys Ala Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys			
35	40	45	
Leu Gln Lys Leu Leu Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp			
50	55	60	
Pro Glu Arg Arg Ala Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu			
65	70	75	80
Val Glu Thr Asp Asn Gly Leu Pro Asn Thr Ile Ser			
85	90		

<210> 2731

<211> 447

<212> DNA

<213> Homo sapiens

<400> 2731

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120
atcggtgtca cctgcgtgtt tcccatcgac ctggccaaga ccaggctgca gaaccagcag
180
aacggccagc gcgtgtacac gagcatgtcc gactgcctca tcaagaccgt ccgctccgag
240
ggctacttcg gcatgttaccg gggagctgct gtgaacttga ccctcgtaac ccccgagaag
300
gccatcaagc tggcagccaa cgacttcttc cgacatcagc tctctaagga cgggcagaag
360
ctgaccctgc tttaaagagat gctggcgggc tgcgtgggctg gcacctgcca ggtgatcgta
420
accacgccccca tggagatgct gaagatc
447

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<210> 2732

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2732

Ala Asp Gln Pro Ala Ser Gln Ala His Gln Trp Arg His Arg Gly Leu			
1	5	10	15
Ile Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala Lys Thr Arg Leu			
20	25	30	
Gln Asn Gln Gln Asn Gly Gln Arg Val Tyr Thr Ser Met Ser Asp Cys			
35	40	45	
Leu Ile Lys Thr Val Arg Ser Glu Gly Tyr Phe Gly Met Tyr Arg Gly			
50	55	60	
Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala Ile Lys Leu			
65	70	75	80
Ala Ala Asn Asp Phe Phe Arg His Gln Leu Ser Lys Asp Gly Gln Lys			
85	90	95	
Leu Thr Leu Leu Lys Glu Met Leu Ala Gly Cys Gly Ala Gly Thr Cys			

100 105 110
Gln Val Ile Val Thr Thr Pro Met Glu Met Leu Lys Ile
 115 120 125

<210> 2733
<211> 3619
<212> DNA
<213> Homo sapiens

<400> 2733
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120
ccccagcacc catgtcaccc ccaacagctg gactgcccgc tggccatgg a cggatcaag
180
gaggacggc ccatcaccat caaggacgac aaggcaacc tcaaccgctg catcgac
240
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300
gagttccatg cttcggctt tgactccgag tccgaatccg agtccgaaaa ttctccacaa
360
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420
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480
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600
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660
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720
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780
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840
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960
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1020
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1320

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 3619

<210> 2734
 <211> 790
 <212> PRT
 <213> Homo sapiens

<400> 2734
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 Gly Asn Leu Asn Arg Cys Ile Ala Asp Val Val Ser Leu Phe Ile Thr
 20 25 30
 Val Met Asp Lys Leu Arg Leu Ala Glu Leu Thr Val Asp Glu Phe Leu
 35 40 45
 Ala Ser Gly Phe Asp Ser Glu Ser Glu Ser Glu Asn Ser Pro
 50 55 60
 Gln Ala Glu Thr Arg Glu Ala Arg Glu Ala Ala Arg Ser Pro Asp Lys
 65 70 75 80
 Pro Gly Gly Ser Pro Ser Ala Ser Arg Arg Lys Gly Arg Ala Ser Glu
 85 90 95
 His Lys Asp Gln Leu Ser Arg Leu Lys Asp Arg Asp Pro Glu Phe Tyr
 100 105 110
 Lys Phe Leu Gln Glu Asn Asp Gln Ser Leu Leu Asn Phe Ser Asp Ser
 115 120 125
 Asp Ser Ser Glu Glu Glu Gly Pro Phe His Ser Leu Pro Asp Val
 130 135 140
 Leu Glu Glu Ala Ser Glu Glu Asp Gly Ala Glu Glu Gly Glu Asp
 145 150 155 160
 Gly Asp Arg Val Pro Arg Gly Leu Lys Gly Lys Lys Asn Ser Val Pro
 165 170 175
 Val Thr Val Ala Met Val Glu Arg Trp Lys Gln Ala Ala Lys Gln Arg

180	185	190
Leu Thr Pro Lys Leu Phe His	Glu Val Val Gln Ala Phe Arg Ala Ala	
195	200	205
Val Ala Thr Thr Arg Gly Asp	Gln Glu Ser Ala Glu Ala Asn Lys Phe	
210	215	220
Gln Val Thr Asp Ser Ala Ala	Phe Asn Ala Leu Val Thr Phe Cys Ile	
225	230	240
Arg Asp Leu Ile Gly Cys Leu Gln Lys	Leu Phe Gly Lys Val Ala	
245	250	255
Lys Asp Ser Ser Arg Met Leu Gln	Pro Ser Ser Ser Pro Leu Trp Gly	
260	265	270
Lys Leu Arg Val Asp Ile Lys	Ala Tyr Leu Gly Ser Ala Ile Gln Leu	
275	280	285
Val Ser Cys Leu Ser Glu Thr	Thr Val Leu Ala Ala Val Leu Arg His	
290	295	300
Ile Ser Val Leu Val Pro Cys	Phe Leu Thr Phe Pro Lys Gln Cys Arg	
305	310	320
Met Leu Leu Lys Arg Met Val Val Val	Trp Ser Thr Gly Glu Glu Ser	
325	330	335
Leu Arg Val Leu Ala Phe Leu Val	Leu Ser Arg Val Cys Arg His Lys	
340	345	350
Lys Asp Thr Phe Leu Gly Pro Val	Leu Lys Gln Met Tyr Ile Thr Tyr	
355	360	365
Val Arg Asn Cys Lys Phe	Thr Ser Pro Gly Ala Leu Pro Phe Ile Ser	
370	375	380
Phe Met Gln Trp Thr Leu	Thr Glu Leu Leu Ala Leu Glu Pro Gly Val	
385	390	400
Ala Tyr Gln His Ala Phe Leu Tyr	Ile Arg Gln Leu Ala Ile His Leu	
405	410	415
Arg Asn Ala Met Thr Thr Arg	Lys Lys Glu Thr Tyr Gln Ser Val Tyr	
420	425	430
Asn Trp Gln Tyr Val His Cys	Leu Phe Leu Trp Cys Arg Val Leu Ser	
435	440	445
Thr Ala Gly Pro Ser Glu Ala	Leu Gln Pro Leu Val Tyr Pro Leu Ala	
450	455	460
Gln Val Ile Ile Gly Cys Ile	Lys Leu Ile Pro Thr Ala Arg Phe Tyr	
465	470	480
Pro Leu Arg Met His Cys Ile	Arg Ala Leu Thr Leu Leu Ser Gly Ser	
485	490	495
Ser Gly Ala Phe Ile Pro Val	Leu Pro Phe Ile Leu Glu Met Phe Gln	
500	505	510
Gln Val Asp Phe Asn Arg Lys	Pro Gly Arg Met Ser Ser Lys Pro Ile	
515	520	525
Asn Phe Ser Val Ile Leu Lys	Leu Ser Asn Val Asn Leu Gln Glu Lys	
530	535	540
Ala Tyr Arg Asp Gly Leu Val	Glu Gln Leu Tyr Asp Leu Thr Leu Glu	
545	550	560
Tyr Leu His Ser Gln Ala His	Cys Ile Gly Phe Pro Glu Leu Val Leu	
565	570	575
Pro Val Val Leu Gln Leu Lys	Ser Phe Leu Arg Glu Cys Lys Val Ala	
580	585	590
Asn Tyr Cys Arg Gln Val Gln	Gln Leu Leu Gly Lys Val Gln Glu Asn	
595	600	605
Ser Ala Tyr Ile Cys Ser Arg	Arg Gln Arg Val Ser Phe Gly Val Ser	

610	615	620
Glu Gln Gln Ala Val Glu Ala Trp Glu Lys Leu Thr Arg Glu Glu Gly		
625	630	635
Thr Pro Leu Thr Leu Tyr Tyr Ser His Trp Arg Lys Leu Arg Asp Arg		
645	650	655
Glu Ile Gln Leu Glu Ile Ser Gly Lys Glu Arg Val Arg Leu Gly Glu		
660	665	670
Gly Thr Trp Leu Glu Asp Leu Asn Phe Pro Glu Ile Lys Arg Arg Lys		
675	680	685
Met Ala Asp Arg Lys Asp Glu Asp Arg Lys Gln Phe Lys Asp Leu Phe		
690	695	700
Asp Leu Asn Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Leu Glu Arg		
705	710	715
Gly Ile Leu Gly Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu		
725	730	735
Glu Asp Glu Glu Glu Gly Glu Asp Ser Ser Asn Ser Glu Gly Glu		
740	745	750
Trp Ser Trp Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly		
755	760	765
Glu Leu Gln Gln Leu Ala Gln Gly Pro Glu Asp Glu Leu Glu Asp Leu		
770	775	780
Gln Leu Ser Glu Asp Asp		
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<210> 2735

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 2735

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720

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<210> 2736
 <211> 218
 <212> PRT
 <213> Homo sapiens

<400> 2736

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Phe	His	Ser	Ser	His	Ile	Ser	Thr	Ile	Gly	Val	Asp	Phe	Lys	Met	Lys
														35	45
Thr	Ile	Glu	Val	Asp	Gly	Ile	Lys	Val	Arg	Ile	Gln	Ile	Trp	Asp	Thr
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Ala	Gly	Gln	Glu	Arg	Tyr	Gln	Thr	Ile	Thr	Lys	Gln	Tyr	Tyr	Arg	Arg
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Ala	Gln	Gly	Ile	Phe	Leu	Val	Tyr	Asp	Ile	Ser	Ser	Glu	Arg	Ser	Tyr
														85	95
Gln	His	Ile	Met	Lys	Trp	Val	Ser	Asp	Val	Asp	Glu	Tyr	Ala	Pro	Glu
														100	110
Gly	Val	Gln	Lys	Ile	Leu	Ile	Gly	Asn	Lys	Ala	Asp	Glu	Gln	Lys	

115	120	125
Arg Gln Val Gly Arg Glu Gln Gly Gln Gln Lys Cys Pro Ser Leu Gln		
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Leu Ala Lys Glu Tyr Gly Met Asp Phe Tyr Glu Thr Ser Ala Cys Thr		
145	150	155
Asn Leu Asn Ile Lys Glu Ser Phe Thr Arg Leu Thr Glu Leu Val Leu		
165	170	175
Gln Ala His Arg Lys Glu Leu Glu Gly Leu Arg Met Arg Ala Ser Asn		
180	185	190
Glu Leu Ala Leu Ala Glu Leu Glu Glu Glu Gly Lys Pro Glu Gly		
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Pro Ala Asn Ser Ser Lys Thr Cys Trp Cys		
210	215	

<210> 2737

<211> 898

<212> DNA

<213> Homo sapiens

<400> 2737

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<210> 2738

<211> 299

<212> PRT

<213> Homo sapiens

<400> 2738

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 35 40 45
 Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser
 50 55 60
 Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val
 65 70 75 80
 Arg Ser Leu Cys Glu Ser Glu Glu Gln Arg Leu Leu Glu Gln Val His
 85 90 95
 Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His
 100 105 110
 Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val
 115 120 125
 Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln
 130 135 140
 Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln
 145 150 155 160
 Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu
 165 170 175
 Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr
 180 185 190
 Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu
 195 200 205
 Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys
 210 215 220
 Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala
 225 230 235 240
 Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn
 245 250 255
 Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys
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 Gly Ser Gly Ser Asp Cys Arg Leu Gly His Asn Ala Phe Ser Trp Val
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<210> 2739

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2739

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aattgcacgg tgctgtcggt gcagcagatc ggcgagggtgt tcgagtgcac cttcacctgt
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480
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1320
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1501

<210> 2740

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2740

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Ile	Ile	Ser	Gly	Val	Val	Ser	Leu	Phe	Ile	Phe	Gly	Phe	Cys	Trp	Leu
35									40						45
Ser	Pro	Ala	Leu	Gln	Asp	Leu	Gln	Ala	Thr	Glu	Ala	Asn	Cys	Thr	Val
50									55						60
Leu	Ser	Val	Gln	Gln	Ile	Gly	Glu	Val	Phe	Glu	Cys	Thr	Phe	Thr	Cys
65								70							80
Gly	Ala	Asp	Cys	Arg	Gly	Thr	Ser	Gln	Tyr	Pro	Cys	Val	Gln	Val	Tyr
85								90							95
Val	Asn	Asn	Ser	Glu	Ser	Asn	Ser	Arg	Ala	Leu	Leu	His	Ser	Asp	Glu
100									105						110
His	Gln	Leu	Leu	Thr	Asn	Pro	Lys	Cys	Ser	Tyr	Ile	Pro	Pro	Cys	Lys
115									120						125
Arg	Glu	Asn	Gln	Lys	Asn	Leu	Glu	Ser	Val	Met	Asn	Trp	Gln	Gln	Tyr
130									135						140
Trp	Lys	Asp	Glu	Ile	Gly	Ser	Gln	Pro	Phe	Thr	Cys	Tyr	Phe	Asn	Gln
145								150							160
His	Gln	Arg	Pro	Asp	Asp	Val	Leu	Leu	His	Arg	Thr	His	Asp	Glu	Ile
165									170						175
Val	Leu	Leu	His	Cys	Phe	Leu	Trp	Pro	Leu	Val	Thr	Phe	Val	Val	Gly
180									185						190
Val	Leu	Ile	Val	Val	Leu	Thr	Ile	Cys	Ala	Lys	Ser	Leu	Ala	Val	Lys
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Ala	Glu	Ala	Met	Lys	Lys	Arg	Lys	Phe	Ser						
210								215							

<210> 2741
<211> 1487
<212> DNA
<213> Homo sapiens

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360
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600

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 1380
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<210> 2742

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2742

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20															
Lys	Phe	Ser	Cys	Cys	Gly	Gly	Ile	Ser	Tyr	Lys	Asp	Trp	Ser	Gln	Asn
35															
Met	Tyr	Phe	Asn	Cys	Ser	Glu	Asp	Asn	Pro	Ser	Arg	Glu	Arg	Cys	Ser
50															
Val	Pro	Tyr	Ser	Cys	Cys	Leu	Pro	Thr	Pro	Asp	Gln	Ala	Val	Ile	Asn
65															
Thr	Met	Cys	Gly	Gln	Gly	Met	Gln	Ala	Phe	Asp	Tyr	Leu	Glu	Ala	Ser
85															
Lys	Val	Ile	Tyr	Thr	Asn	Gly	Cys	Ile	Asp	Lys	Leu	Val	Asn	Trp	Ile
100															
His	Ser	Asn	Leu	Phe	Leu	Leu	Gly	Gly	Val	Ala	Leu	Gly	Leu	Ala	Ile
115															
Pro	Gln	Leu	Val	Gly	Ile	Leu	Leu	Ser	Gln	Ile	Leu	Val	Asn	Gln	Ile

130	135	140
Lys Asp Gln Ile Lys Leu Gln Leu Tyr Asn Gln Gln His Arg Ala Asp		
145	150	155
Pro Trp Tyr		160

<210> 2743
<211> 384
<212> DNA
<213> Homo sapiens

<400> 2743
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240
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<210> 2744
<211> 69
<212> PRT
<213> Homo sapiens

<400> 2744
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35 40 45
Gln Ser Pro Pro Gly Ala Ser Arg Asp Trp Ser Val Pro Ser Pro Pro
50 55 60
Arg Ala Tyr Gln Asp
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<210> 2745
<211> 769
<212> DNA
<213> Homo sapiens

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<210> 2746
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2746
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 35 40 45
 Gly Pro Phe Pro Pro Gly Arg Glu Thr Ser Arg Pro Ala Pro His Thr
 50 55 60
 Thr Ala Lys Arg Gly Leu Ser His Leu Glu Arg Asn Phe Gln Thr Ser
 65 70 75 80
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 Pro Asp

<210> 2747
 <211> 1100
 <212> DNA
 <213> Homo sapiens

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420
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480
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<210> 2748

<211> 205

<212> PRT

<213> Homo sapiens

<400> 2748

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Glu Pro Arg Pro Ala Pro Arg Thr Ala Pro Arg Lys Pro Gl

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37 42 47
38 43 48
39 44 49

Gly Cys Phe Ala Cys Val Ser Lys Pro Pro Ala Leu G

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Ala Pro Ala Pro Glu Pro Ser Ala Ser Pro Pro Pro Met Ala Pro Thr Leu

Blue Bus Met Grey Sun Is. San San Juan Then Blue San Val And Als Ma

Phe Pro Met Glu Ser Lys ser ser Lys Thr Asp Ser Val Arg Ala Ala

Gly-Ala-Pro-Pro-Ala-Gly-Lys-His-Leu-Ala-Glu-Lys-Lys-Thr-Met-Thr

City, and the King and Queen of England, and the Duke of York, and the Duke of Albany, and the Duke of Clarence, and the Duke of Bedford, and the Duke of Exeter, and the Duke of Lancast

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Glu Val Thr Pro Asp Arg Ser Met Ile Ala Ala Ala Val Gln Pro Val
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Pro Asn Pro Ile Ile Ser Tyr Asp Gly Val Asn Lys Asn Ile Ala Ser

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1920
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1980
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2040

tctgttcagg gcctctgacc ttctttctgc ccccaaccac tggcccagaa gctactgacc
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<210> 2764

<211> 423

<212> PRT

<213> Homo sapiens

<400> 2764

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															20
20															25
Val	Ala	Ser	Gly	Pro	Val	Val	Gly	Gly	Arg	Lys	Lys	Val	Arg	Gly	Pro
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35															40
Glu	Gln	Ile	Lys	Gln	Glu	Val	Glu	Ser	Glu	Glu	Glu	Lys	Pro	Asp	Arg
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50															55
Met	Asp	Ile	Asp	Ser	Glu	Asp	Thr	Asp	Ser	Asn	Thr	Ser	Leu	Gln	Thr
															60
65															70
Arg	Ala	Arg	Glu	Lys	Arg	Lys	Pro	Gln	Leu	Glu	Lys	Asp	Thr	Lys	Pro
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85															90
Lys	Glu	Pro	Arg	Tyr	Thr	Pro	Val	Ser	Ile	Tyr	Glu	Glu	Lys	Leu	Leu
															100
100															105
Leu	Lys	Arg	Leu	Glu	Ala	Cys	Pro	Gly	Ala	Val	Ala	Met	Thr	Pro	Glu
															115
115															120
Ala	Arg	Arg	Leu	Lys	Arg	Lys	Leu	Ile	Val	Arg	Gln	Ala	Lys	Arg	Asp
															130
130															135
Arg	Gly	Leu	Pro	Leu	Phe	Asp	Leu	Asp	Gln	Val	Val	Asn	Ala	Ala	Leu
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145															150
Leu	Leu	Val	Asp	Gly	Ile	Tyr	Gly	Ala	Lys	Glu	Gly	Gly	Ile	Ser	Arg
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Leu	Pro	Ala	Gly	Gln	Ala	Thr	Tyr	Arg	Thr	Thr	Cys	Gln	Asp	Phe	Arg
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180															185
Ile	Leu	Asp	Arg	Tyr	Gln	Thr	Ser	Leu	Pro	Ser	Arg	Lys	Gly	Phe	Arg
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195															200
His	Gln	Thr	Thr	Lys	Phe	Leu	Tyr	Arg	Leu	Val	Gly	Ser	Glu	Asp	Met
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210															215
Ala	Val	Asp	Gln	Ser	Ile	Val	Ser	Pro	Tyr	Thr	Ser	Arg	Ile	Leu	Lys
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225															230
Pro	Tyr	Ile	Arg	Arg	Asp	Tyr	Glu	Thr	Lys	Pro	Pro	Lys	Leu	Gln	Leu
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245															250
Leu	Ser	Gln	Ile	Arg	Ser	His	Leu	His	Arg	Ser	Asp	Pro	His	Trp	Thr
															260
260															265
Pro	Glu	Pro	Asp	Ala	Pro	Leu	Asp	Tyr	Cys	Tyr	Val	Arg	Pro	Asn	His
															275
275															280
Ile	Pro	Thr	Ile	Asn	Ser	Met	Cys	Gln	Glu	Phe	Phe	Trp	Pro	Gly	Ile
															290
290															295
Asp	Leu	Ser	Glu	Cys	Leu	Gln	Tyr	Pro	Asp	Phe	Ser	Val	Val	Val	Leu
															305
305															310
Tyr	Lys	Lys	Val	Ile	Ile	Ala	Phe	Gly	Phe	Met	Val	Pro	Asp	Val	Lys
															315
315															320

325	330	335
Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg		
340	345	350
Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys		
355	360	365
Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met		
370	375	380
Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Glu Tyr Val Leu Asp		
385	390	395
Phe Tyr Asp Lys Tyr Tyr Pro Leu Glu Ser Thr Glu Cys Lys His Ala		
405	410	415
Phe Phe Leu Arg Leu Arg Arg		
420		

<210> 2765

<211> 582

<212> DNA

<213> Homo sapiens

<400> 2765

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120
agtggagggg caggatggca cggccacttg gggcttgggg ggcgtccggc tgccgtaccg
180
tggctgcaag cctaaaccgg gcttgggccc atcctgagca gcccagggtt tgttcagctc
240
ccggcttctg gccactcgac atcgccagag tctccaggcc agcacagggc cagcgatggc
300
aagtccaaga agcaggcacc cgctgaccac cactgccccg atagttgcag aggccaggcc
360
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420
gcagagcaga ggcttctggc cagacgagtt gtctcggcgg atgtcgtgcc aggactccag
480
ggcacagttg cagtcggcct gcaggtcaag gtcacagcgg gcccggcagcg ccccatccac
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582

<210> 2766

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2766

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20	25	30
Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr		
35	40	45
Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln		

50 55 60
Leu Ser Gly Gln Trp Trp Ser Ala Gly Ala Cys Phe Leu Asp Leu Pro
65 70 75 80
Ser Leu Ala Leu Cys Trp Pro Gly Asp Ser Gly Asp Ala Glu Trp Pro
85 90 95
Glu Ala Gly Ser
100

<210> 2767

<211> 1202

<212> DNA

<213> Homo sapiens

<400> 2767

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120
gactcagcct acgacagcaa cgaccctgat gtggaatcca acagcagcag tggcatcagc
180
tctcccagca ggcagccccca ggtgccatg gccacagctg ctggcttggaa tagcgccggc
240
ccacaggatg cccgagaggt cagcccagag cccattgtga gcaccgtggc caggctgaaa
300
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tgcctcgaga gccgggtgac aaaccaaaca ctaacaaaga gtgaaggggaa cttccccgtg
420
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480
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540
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600
gcgtcctctg acagctcgcc cgtggcttct cttccagtc caaaaagaaa tttttcagc
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720
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780
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840
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960
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1020
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1080
acggggggag aagtggggag gcagagtgtg aaggaaata aaaccaatta gtaatttta
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1200

aq
1202

<210> 2768
<211> 282
<212> PRT
<213> Homo sapiens

<400> 2768

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Glu	Val	Ser	Pro	Glu	Pro	Ile	Val	Ser	Thr	Val	Ala	Arg	Leu	Lys	Ser
						20			25					30	
Ser	Leu	Ala	Gln	Pro	Asp	Arg	Arg	Tyr	Ser	Glu	Pro	Ser	Met	Pro	Ser
						35			40				45		
Ser	Gln	Glu	Cys	Leu	Glu	Ser	Arg	Val	Thr	Asn	Gln	Thr	Leu	Thr	Lys
						50			55			60			
Ser	Glu	Gly	Asp	Phe	Pro	Val	Pro	Arg	Val	Gly	Ser	Arg	Leu	Glu	Ser
						65			70			75		80	
Glu	Glu	Ala	Glu	Asp	Pro	Phe	Pro	Glu	Glu	Val	Phe	Pro	Ala	Val	Gln
						85				90			95		
Gly	Lys	Thr	Lys	Arg	Pro	Val	Asp	Leu	Lys	Ile	Lys	Asn	Leu	Ala	Pro
						100			105			110			
Gly	Ser	Val	Leu	Pro	Arg	Ala	Leu	Val	Leu	Lys	Ala	Phe	Ser	Ser	Ser
						115			120			125			
Ser	Leu	Asp	Ala	Ser	Ser	Asp	Ser	Ser	Pro	Val	Ala	Ser	Pro	Ser	Ser
						130			135			140			
Pro	Lys	Arg	Asn	Phe	Phe	Ser	Arg	Mis	Gln	Ser	Phe	Thr	Thr	Lys	Thr
						145			150			155		160	
Glu	Lys	Gly	Lys	Pro	Ser	Arg	Glu	Ile	Lys	Lys	His	Ser	Met	Ser	Phe
						165			170			175			
Thr	Phe	Ala	Pro	His	Lys	Lys	Val	Leu	Thr	Lys	Asn	Leu	Ser	Ala	Gly
						180			185			190			
Ser	Gly	Lys	Ser	Gln	Asp	Phe	Thr	Arg	Asp	His	Val	Pro	Arg	Gly	Val
						195			200			205			
Arg	Lys	Glu	Ser	Gln	Leu	Ala	Gly	Arg	Ile	Val	Gln	Glu	Asn	Gly	Cys
						210			215			220			
Glu	Thr	His	Asn	Gln	Thr	Ala	Arg	Gly	Phe	Cys	Leu	Arg	Pro	His	Ala
						225			230			235		240	
Leu	Ser	Val	Asp	Asp	Val	Phe	Gln	Gly	Ala	Asp	Trp	Glu	Arg	Pro	Gly
						245			250			255			
Ser	Pro	Pro	Ser	Tyr	Glu	Glu	Ala	Met	Gln	Gly	Pro	Ala	Ala	Arg	Leu
						260			265			270			
Val	Ala	Ser	Gln	Gln	Phe	Gln	Phe	Leu	Ala						
						275			280						

<210> 2769
<211> 1286
<212> DNA
<213> Homo sapiens

<400> 2769
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 180
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 240
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 300
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 360
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 420
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 480
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 720
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 780
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 1020
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 1260
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 1286

<210> 2770

<211> 228

<212> PRT

<213> Homo sapiens

<400> 2770

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									20				25		30
Asn	Arg	Ile	Arg	Val	Arg	Gln	Asp	Leu	Ala	Ser	Leu	Pro	Ala	Glu	Leu

35	40	45
Ile Asn Gln Ile Gly Asn Arg Cys His Pro Lys Leu Tyr Asp Glu Gly		
50	55	60
Asp Pro Ser Glu Lys Leu Glu Leu Val Thr Gly Thr Asn Val Tyr Ile		
65	70	75
Thr Arg Ala Gln Leu Met Asn Cys His Val Ser Ala Gly Thr Arg His		
85	90	95
Lys Val Leu Leu Arg Arg Leu Leu Ala Ser Phe Phe Asp Arg Asn Thr		
100	105	110
Leu Ala Asn Ser Cys Gly Thr Gly Ile Arg Ser Ser Thr Asn Asp Pro		
115	120	125
Arg Arg Lys Pro Leu Asp Ser Arg Val Leu His Ala Val Lys Tyr Tyr		
130	135	140
Cys Gln Asn Phe Ala Pro Asn Phe Lys Glu Ser Glu Met Asn Ala Ile		
145	150	155
Ala Ala Asp Met Cys Thr Asn Ala Arg Arg Val Val Arg Lys Ser Trp		
165	170	175
Met Pro Lys Val Lys Val Leu Lys Ala Glu Asp Asp Ala Tyr Thr Thr		
180	185	190
Phe Ile Ser Glu Thr Gly Lys Ile Glu Pro Asp Met Met Gly Val Glu		
195	200	205
His Gly Phe Glu Thr Ala Ser His Glu Gly Glu Ala Gly Pro Ile Ala		
210	215	220
Glu Ala Leu Gln		
225		

<210> 2771
<211> 1668
<212> DNA
<213> Homo sapiens

<400> 2771
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180
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240
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300
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360
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420
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480
540
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540
caggatgcat attattcaga ggtcctgtgt tttctgcagg ataagaagat gttcaagtct
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 1320
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 1560
 gcacattctt actcagtttt tttccctctgt cctacgctgc ttccctcaact ccccttctcc
 1620
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 1668

<210> 2772
 <211> 258
 <212> PRT
 <213> Homo sapiens

<400> 2772
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 35 40 45
 Thr Thr Leu Gly Thr Leu Arg Lys Phe Pro Gly Ser Lys Leu Ala Glu
 50 55 60
 Met Phe Ser Ser Leu Ala Lys Ala Ser Thr Asp Ala Glu Gly Arg Phe
 65 70 75 80
 Phe Ile Asp Arg Pro Ser Thr Tyr Phe Arg Pro Ile Leu Asp Tyr Leu
 85 90 95
 Arg Thr Gly Gln Val Pro Thr Gln His Ile Pro Glu Val Tyr Arg Glu

100	105	110
Ala Gln Phe Tyr Glu Ile Lys Pro	Leu Val Lys Leu Leu	Glu Asp Met
115	120	125
Pro Gln Ile Phe Gly Glu Gln Val Ser Arg Lys Gln	Phe Leu Leu Gln	
130	135	140
Val Pro Gly Tyr Ser Glu Asn Leu Glu Leu Met Val	Arg Leu Ala Arg	
145	150	155
Ala Glu Ala Ile Thr Ala Arg Lys Ser Ser Val	Leu Val Cys Leu Val	
165	170	175
Glu Thr Glu Glu Gln Asp Ala Tyr Tyr Ser Glu Val	Leu Cys Phe Leu	
180	185	190
Gln Asp Lys Lys Met Phe Lys Ser Val Val Lys Phe	Gly Pro Trp Lys	
195	200	205
Ala Val Leu Asp Asn Ser Asp Leu Met His Cys	Leu Glu Met Asp Ile	
210	215	220
Lys Ala Gln Gly Tyr Lys Val Phe Ser Lys Phe	Tyr Leu Thr Tyr Pro	
225	230	235
Thr Lys Arg Asn Glu Phe His Phe Asn Ile Tyr Ser	Phe Thr Phe Thr	
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<210> 2773

<211> 593

<212> DNA

<213> Homo sapiens

<400> 2773

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120
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180
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240
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300
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360
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420
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480
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593

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<210> 2774

<211> 157

<212> PRT

<213> Homo sapiens

<400> 2774
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 35 40 45
 Gly Ile Met Arg Ser Lys Lys Pro Lys Lys His Pro Lys Val Ala Val
 50 55 60
 Lys Ala Lys Pro Ser Pro Arg Leu Thr Ile Phe Asp Glu Glu Val Asp
 65 70 75 80
 Pro Asp Glu Gly Leu Phe Gly Pro Gly Arg Lys Leu Ser Pro Gln Asp
 85 90 95
 Pro Ser Glu Asp Val Ser Ser Met Asp Pro Leu Lys Leu Phe Asp Asp
 100 105 110
 Pro Asp Leu Gly Gly Ala Ile Pro Leu Gly Asp Ser Leu Leu Leu Pro
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 130 135 140
 Ala Ser Lys Glu Leu Phe Arg Gln Ile Gln Lys Glu Pro
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<210> 2775

<211> 3139

<212> DNA

<213> Homo sapiens

<400> 2775
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 120
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 145 150 155 160

Leu Leu Leu Leu Gln Asn Gln His Thr Gln Pro Phe Ala Ser Leu
 165 170 175

Asn Phe Leu Asp Tyr Ile Ser Ser Asn Asn Arg Gln Thr Leu Pro Cys
 180 185 190

Val Ser Trp Ser Tyr Asp Arg Val Gln Ala Asp Asn Asn Asp Tyr Trp
 195 200 205

Thr Glu Cys Phe Asn Ala Leu Glu Gln Gly Arg Gln Tyr Val Asp Asn
 210 215 220

Pro Thr Gly Gly Lys Val Asp Glu Ala Leu Val Arg Ser Ala Thr Val
 225 230 235 240

His Ser Trp Pro His Ser Asn Val Leu Asp Ile Ser Met Leu Ser Ser
 245 250 255

Gln Asp Val Val Arg Met Leu Leu Ser Leu Gln Pro Phe Leu Gln Asp
 260 265 270

Ala Ile Gln Lys Lys Arg Thr Gly Arg Thr Trp Glu Asn Ile Gln His
 275 280 285

Val Gln Gly Pro Leu Thr Trp Gln Gln Phe His Lys Met Ala Gly Arg
 290 295 300

Gly Thr Tyr Gly Ser Glu Glu Ser Pro Glu Pro Leu Pro Ile Pro Thr
 305 310 315 320

Leu Leu Val Gly Tyr Asp Lys Asp Phe Leu Thr Ile Ser Pro Phe Ser
 325 330 335

Leu Pro Phe Trp Glu Arg Leu Leu Asp Pro Tyr Gly Gly His Arg
 340 345 350

Asp Val Ala Tyr Ile Val Val Cys Pro Glu Asn Glu Ala Leu Leu Glu
 355 360 365

Gly Ala Lys Thr Phe Phe Arg Asp Leu Ser Ala Val Tyr Glu Met Cys
 370 375 380

Arg Leu Gly Gln His Lys Pro Ile Cys Lys Val Leu Arg Asp Gly Ile

385	390	395	400
Met Arg Val Gly Lys Thr Val Ala Gln Lys Leu Thr Asp Glu Leu Val			
405	410	415	
Ser Glu Trp Phe Asn Gln Pro Trp Ser Gly Glu Glu Asn Asp Asn His			
420	425	430	
Ser Arg Leu Lys Leu Tyr Ala Gln Val Cys Arg His His Leu Ala Pro			
435	440	445	
Tyr Leu Ala Thr Leu Gln Leu Asp Ser Ser Leu Leu Ile Pro Pro Lys			
450	455	460	
Tyr Gln Thr Pro Pro Ala Ala Ala Gln Gly Gln Ala Thr Pro Gly Asn			
465	470	475	480
Ala Gly Pro Leu Ala Pro Asn Gly Ser Ala Ala Pro Pro Ala Gly Ser			
485	490	495	
Ala Phe Asn Pro Thr Ser Asn Ser Ser Ser Thr Asn Pro Ala Ala Ser			
500	505	510	
Ser Ser Ala Ser Gly Ser Ser Val Pro Pro Val Ser Ser Ser Ala Ser			
515	520	525	
Ala Pro Gly Ile Ser Gln Ile Ser Thr Thr Ser Ser Gly Phe Ser			
530	535	540	
Gly Ser Val Gly Gly Gln Asn Pro Ser Thr Gly Gly Ile Ser Ala Asp			
545	550	555	560
Arg Thr Gln Arg Asn Ile Gly Cys Gly Gly Asp Thr Asp Pro Gly Gln			
565	570	575	
Ser Ser Ser Gln Pro Ser Gln Asp Gly Gln Glu Ser Val Thr Glu Arg			
580	585	590	
Glu Arg Ile Gly Ile Pro Thr Glu Pro Asp Ser Ala Asp Ser His Ala			
595	600	605	
His Pro Pro Ala Val Val Ile Tyr Met Val Asp Pro Phe Thr Tyr Ala			
610	615	620	
Ala Glu Glu Asp Ser Thr Ser Gly Asn Phe Trp Leu Leu Ser Leu Met			
625	630	635	640
Arg Cys Tyr Thr Glu Met Leu Asp Asn Leu Pro Glu His Met Arg Asn			
645	650	655	
Ser Phe Ile Leu Gln Ile Val Pro Cys Gln Tyr Met Leu Gln Thr Met			
660	665	670	
Lys Asp Glu Gln Val Phe Tyr Ile Gln Tyr Leu Lys Ser Met Ala Phe			
675	680	685	
Ser Val Tyr Cys Gln Cys Arg Arg Pro Leu Pro Thr Gln Ile His Ile			
690	695	700	
Lys Ser Leu Thr Gly Phe Gly Pro Ala Ala Ser Ile Glu Met Thr Leu			
705	710	715	720
Lys Asn Pro Glu Arg Pro Ser Pro Ile Gln Leu Tyr Ser Pro Pro Phe			
725	730	735	
Ile Leu Ala Pro Ile Lys Asp Lys Gln Thr Glu Leu Gly Glu Thr Phe			
740	745	750	
Gly Glu Ala Ser Gln Lys Tyr Asn Val Leu Phe Val Gly Tyr Cys Leu			
755	760	765	
Ser His Asp Gln Arg Trp Leu Leu Ala Ser Cys Thr Asp Leu His Gly			
770	775	780	
Glu Leu Leu Glu Thr Cys Val Val Asn Ile Ala Leu Pro Asn Arg Ser			
785	790	795	800
Arg Arg Ser Lys Val Ser Ala Arg Lys Ile Gly Leu Gln Lys Leu Trp			
805	810	815	
Glu Trp Cys Ile Gly Ile Val Gln Met Thr Ser Leu Pro Trp Arg Val			

820	825	830
Val Ile Gly Arg Leu Gly Arg Leu Gly His	Gly Glu Leu Lys Asp Trp	
835	840	845
Ser Ile Leu Leu Gly Glu Cys Ser Leu Gln Thr Ile Ser Lys Lys Leu		
850	855	860
Lys Asp Val Cys Arg Met Cys Gly Ile Ser Ala Ala Asp Ser Pro Ser		
865	870	880
Ile Leu Ser Ala Cys Leu Val Ala Met Glu Pro Gln Gly Ser Phe Val		
885	890	895
Val Met Pro Asp Ala Val Thr Met Gly Ser Val Phe Gly Arg Ser Thr		
900	905	910
Ala Leu Asn Met Gln Ser Ser Gln Leu Asn Thr Pro Gln Asp Ala Ser		
915	920	925
Cys Thr His Ile Leu Val Phe Pro Thr Ser Ser Thr Ile Gln Val Ala		
930	935	940
Pro Ala Asn Tyr Pro Asn Glu Asp Gly Phe Ser Pro Asn Asn Asp Asp		
945	950	955
Met Phe Val Asp Leu Pro Phe Pro Asp Asp Met Asp Asn Asp Ile Gly		
965	970	975
Ile Leu Met Thr Gly Asn Leu His Ser Ser Pro Asn Ser Ser Pro Val		
980	985	990
Pro Ser Pro Gly Ser Pro Ser Gly Ile Gly Val Gly Ser His Phe Gln		
995	1000	1005
His Ser Arg Ser Gln Gly Glu Arg Leu Leu Ser Arg Glu Ala Pro Glu		
1010	1015	1020
Glu Leu Lys Gln Gln Pro Leu Ala Leu Gly Tyr Phe Val Ser Thr Ala		
1025	1030	1035
Lys Ala Glu Asn Leu Pro Gln Trp Phe Trp Ser Ser Cys Pro Gln Ala		
1045	1050	1055
Gln Asn Gln Cys Pro Leu Phe Leu Lys Ala Ser Leu His His His Ile		
1060	1065	1070
Ser Val Ala Gln Thr Asp Glu Leu Leu Pro Ala Arg Asn Ser Gln Arg		
1075	1080	1085
Val Pro His Pro Leu Asp Ser Lys Thr Thr Ser Asp Val Leu Arg Phe		
1090	1095	1100
Val Leu Glu Gln Tyr Asn Ala Leu Ser Trp Leu Thr Cys Asn Pro Ala		
1105	1110	1115
Thr Gln Asp Arg Thr Ser Cys Leu Pro Val His Phe Val Val Leu Thr		
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Gln Leu Tyr Asn Ala Ile Met Asn Ile Leu		
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<210> 2779

<211> 2461

<212> DNA

<213> Homo sapiens

<400> 2779

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120ctacttggga ggctgaggca ggagaatcgc ttgatcctaa gaggcagagg ctgcagtgtat
180

ctgagatcac gccactgcac tccagccccc ggagactctg tctccaaaaaaa aaaaaaaaaaa
240
aaaaaaaaaaa agtatata tataaacata tatcaaagaa gttaagcaaa gtgaggaaaa
300
atgcactccg agcaggaggg ccagcatgtg caaaggccct gcggtgaaaa ggaatttggc
360
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420
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480
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600
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660
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720
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780
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1800

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 1860
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 1920
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 1980
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 2040
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 2340
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 2461

<210> 2780
 <211> 720
 <212> PRT
 <213> Homo sapiens

<400> 2780
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 20 25 30
 Val Thr Gly Ile Arg Arg Met Arg Phe Lys Gly Leu Ala Gly Val Asp
 35 40 45
 Ser Ser Leu Glu Val Val Ser Leu Leu Pro Pro Arg Ser Phe Ser Leu
 50 55 60
 Asn Ser Glu Gly Ala Glu Arg Met Ala Thr Thr Gly Thr Pro Thr Ala
 65 70 75 80
 Asp Arg Gly Asp Ala Ala Ala Thr Asp Asp Pro Ala Ala Arg Phe Gln
 85 90 95
 Val Gln Lys His Ser Trp Asp Gly Leu Arg Ser Ile Ile His Gly Ser
 100 105 110
 Arg Lys Tyr Ser Gly Leu Ile Val Asn Lys Ala Pro His Asp Phe Gln
 115 120 125
 Phe Val Gln Lys Thr Asp Glu Ser Gly Pro His Ser His Arg Leu Tyr
 130 135 140
 Tyr Leu Gly Met Pro Tyr Gly Ser Arg Glu Asn Ser Leu Leu Tyr Ser
 145 150 155 160
 Glu Ile Pro Lys Lys Val Arg Lys Glu Ala Leu Leu Leu Ser Trp
 165 170 175
 Lys Gln Met Leu Asp His Phe Gln Ala Thr Pro His His Gly Val Tyr

180	185	190
Ser Arg Glu Glu Glu Leu Leu Arg Glu Arg Lys Arg Leu Gly Val Phe		
195	200	205
Gly Ile Thr Ser Tyr Asp Phe His Ser Glu Ser Gly Leu Phe Leu Phe		
210	215	220
Gln Ala Ser Asn Ser Leu Phe His Cys Arg Asp Gly Gly Lys Asn Gly		
225	230	235
Phe Met Val Ser Pro Gly Pro Gly Cys Val Ser Pro Met Lys Pro Leu		
245	250	255
Glu Ile Lys Thr Gln Cys Ser Gly Pro Arg Met Asp Pro Lys Ile Cys		
260	265	270
Pro Ala Asp Pro Ala Phe Phe Ser Phe Ile Asn Asn Ser Asp Leu Trp		
275	280	285
Val Ala Asn Ile Glu Thr Gly Glu Glu Arg Arg Leu Thr Phe Cys His		
290	295	300
Gln Gly Leu Ser Asn Val Leu Asp Asp Pro Lys Ser Ala Gly Val Ala		
305	310	315
Thr Phe Val Ile Gln Glu Phe Asp Arg Phe Thr Gly Tyr Trp Trp		
325	330	335
Cys Pro Thr Ala Ser Trp Glu Gly Ser Glu Gly Leu Lys Thr Leu Arg		
340	345	350
Ile Leu Tyr Glu Glu Val Asp Glu Ser Glu Val Glu Val Ile His Val		
355	360	365
Pro Ser Pro Ala Leu Glu Glu Arg Lys Thr Asp Ser Tyr Arg Tyr Pro		
370	375	380
Arg Thr Gly Ser Lys Asn Pro Lys Ile Ala Leu Lys Leu Ala Glu Phe		
385	390	395
Gln Thr Asp Ser Gln Gly Lys Ile Val Ser Thr Gln Glu Lys Glu Leu		
405	410	415
Val Gln Pro Phe Ser Ser Leu Phe Pro Lys Val Glu Tyr Ile Ala Arg		
420	425	430
Ala Gly Trp Thr Arg Asp Gly Lys Tyr Ala Trp Ala Met Phe Leu Asp		
435	440	445
Arg Pro Gln Gln Trp Leu Gln Leu Val Leu Leu Pro Pro Ala Leu Phe		
450	455	460
Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg Leu Ala Ser Ala Arg Ala		
465	470	475
Val Pro Arg Asn Val Gln Pro Tyr Val Val Tyr Glu Glu Val Thr Asn		
485	490	495
Val Trp Ile Asn Val His Asp Ile Phe Tyr Pro Phe Pro Gln Ser Glu		
500	505	510
Gly Glu Asp Glu Leu Cys Phe Leu Arg Ala Asn Glu Cys Lys Thr Gly		
515	520	525
Phe Cys His Leu Tyr Lys Val Thr Ala Val Leu Lys Ser Gln Gly Tyr		
530	535	540
Asp Trp Ser Glu Pro Phe Ser Pro Gly Glu Asp Glu Phe Lys Cys Pro		
545	550	555
Ile Lys Glu Glu Ile Ala Leu Thr Ser Gly Glu Trp Glu Val Leu Ala		
565	570	575
Arg His Gly Ser Lys Ile Trp Val Asn Glu Glu Thr Lys Leu Val Tyr		
580	585	590
Phe Gln Gly Thr Lys Asp Thr Pro Leu Glu His His Leu Tyr Val Val		
595	600	605
Ser Tyr Glu Ala Ala Gly Glu Ile Val Arg Leu Thr Thr Pro Gly Phe		

610	615	620
Ser His Ser Cys Ser Met Ser Gln Asn Phe Asp Met Phe Val Ser His		
625	630	635
Tyr Ser Ser Val Ser Thr Pro Pro Cys Val His Val Tyr Lys Leu Ser		
645	650	655
Gly Pro Asp Asp Asp Pro Leu His Lys Gln Pro Arg Phe Trp Ala Ser		
660	665	670
Met Met Glu Ala Ala Ser Cys Pro Pro Asp Tyr Val Pro Pro Glu Ile		
675	680	685
Phe His Phe His Thr Arg Ser Asp Val Arg Leu Tyr Gly Met Ile Tyr		
690	695	700
Lys Pro His Ala Leu Gln His Ile Thr Lys Lys Ser Thr Val Phe Glu		
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		720

<210> 2781

<211> 1268

<212> DNA

<213> Homo sapiens

<400> 2781

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 120
 gacctctgt cagatttga tgagtttct tccagattca agaacctggc ccaccagcac
 180
 cagtcatgt tccccaccct ggaaatagac attgaaggcc aactcaaaag gctcaaggc
 240
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 300
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 360
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 420
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 480
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 660
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 720
 aaaaggattc cctatttccc agctaaccag gagatgcttc agaaggctga agttgagtat
 780
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 900
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 960
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 1020

ccggccacaac caacacccaaa gcaggaaaaac cattttctgt acttttatat ttctgttcaa
 1080
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 1140
 aattatattc aaaatgagcc aaagtgccta gagaccttct atgacacatt agtgcacat
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<210> 2782
 <211> 314
 <212> PRT
 <213> Homo sapiens

<400> 2782
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 35 40 45
 Phe Ser Ser Arg Phe Lys Asn Leu Ala His Gln His Gln Ser Met Phe
 50 55 60
 Pro Thr Leu Glu Ile Asp Ile Glu Gly Gln Leu Lys Arg Leu Lys Gly
 65 70 75 80
 Phe Ala Glu Arg Ile Arg Pro Met Val Arg Asp Gly Val Tyr Phe Met
 85 90 95
 Tyr Glu Ala Leu His Gly Pro Pro Lys Lys Ile Leu Val Glu Gly Ala
 100 105 110
 Asn Ala Ala Leu Leu Asp Ile Asp Phe Gly Thr Tyr Pro Phe Val Thr
 115 120 125
 Ser Ser Asn Cys Thr Val Gly Gly Val Cys Thr Gly Leu Gly Ile Pro
 130 135 140
 Pro Gln Asn Ile Gly Asp Val Tyr Gly Val Val Lys Ala Tyr Thr Thr
 145 150 155 160
 Arg Val Gly Ile Gly Ala Phe Pro Thr Glu Gln Ile Asn Glu Ile Gly
 165 170 175
 Gly Leu Leu Gln Thr Arg Gly His Glu Trp Gly Val Thr Thr Gly Arg
 180 185 190
 Lys Arg Arg Cys Gly Trp Leu Asp Leu Met Ile Leu Arg Tyr Ala His
 195 200 205
 Met Val Asn Gly Phe Thr Ala Leu Ala Leu Thr Lys Leu Asp Ile Leu
 210 215 220
 Asp Val Leu Gly Glu Val Lys Val Gly Val Ser Tyr Lys Leu Asn Gly
 225 230 235 240
 Lys Arg Ile Pro Tyr Phe Pro Ala Asn Gln Glu Met Leu Gln Lys Val
 245 250 255
 Glu Val Glu Tyr Glu Thr Leu Pro Gly Trp Lys Ala Asp Thr Thr Gly
 260 265 270
 Ala Arg Arg Trp Glu Asp Leu Pro Pro Gln Ala Gln Asn Tyr Ile Arg
 275 280 285
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290 295 300
Lys Ser Arg Glu Ser Met Ile Gln Leu Phe
305 310

<210> 2783
<211> 2376
<212> DNA
<213> Homo sapiens

<400> 2783
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120
gttGATGTAG aagattatta cccAGCTTC ctggACATGG tgCGGAGCCT gctggatggc
180
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240
attGCCttTA ccatGGACAA actGATCCAG AGCATTGTCa gACAGCTGCA gCATATCGT
300
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360
accGGAGGCC agCTGAACAC acAGAACtCA aggAGCCTCC tggAGTCAAC gtATCAGCGG
420
aaAGCTGAGC agCTAATGTC agATGAGAAT tgcTTAAGC ttATGTTtAT tcAGAGCCAA
480
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540
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720
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780
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1080
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1140
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1260
ttAGGAACAT GAATAACCTTA caAGCTGAA gCTGGAACtt ttCCCAAAGG gttttGGGta
1320

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 2280
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<210> 2784
 <211> 361
 <212> PRT
 <213> Homo sapiens

<400> 2784
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 20 25 30
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 35 40 45
 Ala Phe Leu Asp Met Val Arg Ser Leu Leu Asp Gly Asn Ile Asp Ser
 50 55 60
 Ser Gln Tyr Glu Asp Ser Leu Arg Glu Met Phe Thr Ile His Ala Tyr
 65 70 75 80
 Ile Ala Phe Thr Met Asp Lys Leu Ile Gln Ser Ile Val Arg Gln Leu

85	90	95
Gln His Ile Val Ser Asp Glu Ile Cys Val Gln Val Thr Asp Leu Tyr		
100	105	110
Leu Ala Glu Asn Asn Asn Gly Ala Thr Gly Gly Gln Leu Asn Thr Gln		
115	120	125
Asn Ser Arg Ser Leu Leu Glu Ser Thr Tyr Gln Arg Lys Ala Glu Gln		
130	135	140
Leu Met Ser Asp Glu Asn Cys Phe Lys Leu Met Phe Ile Gln Ser Gln		
145	150	155
Gly Gln Val Gln Leu Thr Ile Glu Leu Leu Asp Thr Glu Glu Glu Asn		
165	170	175
Ser Asp Asp Pro Val Glu Ala Glu Arg Trp Ser Asp Tyr Val Glu Arg		
180	185	190
Tyr Met Asn Ser Asp Thr Thr Ser Pro Glu Leu Arg Glu His Leu Ala		
195	200	205
Gln Lys Pro Val Phe Leu Pro Arg Asn Leu Arg Arg Ile Arg Lys Cys		
210	215	220
Gln Arg Gly Arg Glu Gln Gln Glu Lys Glu Gly Lys Glu Gly Asn Ser		
225	230	235
Lys Lys Thr Met Glu Asn Val Asp Ser Leu Asp Lys Leu Glu Cys Arg		
245	250	255
Phe Lys Leu Asn Ser Tyr Lys Met Val Tyr Val Ile Lys Ser Glu Asp		
260	265	270
Tyr Met Tyr Arg Arg Thr Ala Leu Leu Arg Ala His Gln Ser His Glu		
275	280	285
Arg Val Ser Lys Arg Leu His Gln Arg Phe Gln Ala Trp Val Asp Lys		
290	295	300
Trp Thr Lys Glu His Val Pro Arg Glu Met Ala Ala Glu Thr Ser Lys		
305	310	315
Trp Leu Met Gly Glu Gly Leu Glu Gly Leu Val Pro Cys Thr Thr		
325	330	335
Cys Asp Thr Glu Thr Leu His Phe Val Ser Ile Asn Lys Tyr Arg Val		
340	345	350
Lys Tyr Gly Thr Val Phe Lys Ala Pro		
355	360	

<210> 2785

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2785

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tgatgagatc ctccattaca tcctgagtca cgtccccagc acagatctga ttctgaacgt
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cgcccgaggat atccagcagc tgagcatggc tggctgctac tggctgcctg gctccaccgt
360

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ggaacacgtg gccccgtgcc cgcaaggctgg tgaaggtgaa cctctcgccc tgccacactca
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 cttccctgcg cctctacaag atgctctcgg ccctgcagca cctgcgcctcg ctggccatcg
 480
 acgtgagccc cg
 492

<210> 2786
<211> 155
<212> PRT
<213> Homo sapiens

<400> 2786
Met Ala Ser Ser Gly Glu Asp Ile Ser Asn Asp Asp Asp Asp Met His
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Pro Ala Ala Ala Gly Met Ala Asp Gly Val His Leu Leu Gly Phe Ser
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Asp Glu Ile Leu Leu His Ile Leu Ser His Val Pro Ser Thr Asp Leu
35 40 45
Ile Leu Asn Val Arg Arg Thr Cys Arg Lys Leu Ala Ala Leu Cys Leu
50 55 60
Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala
65 70 75 80
Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile
85 90 95
Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val
100 105 110
Glu His Val Ala Arg Cys Pro Gln Pro Gly Glu Gly Pro Leu Gly
115 120 125
Leu Pro Pro His Phe Pro Ala Pro Leu Gln Asp Ala Leu Gly Pro Ala
130 135 140
Ala Pro Ala Leu Ala Gly His Arg Arg Glu Pro
145 150 155

<210> 2787
<211> 299
<212> DNA
<213> Homo sapiens

<400> 2787
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atgtggggag aagagccgta ctctgacata tcagttgcta aaacacgtgc agggcatgcc
120
acaatgcaca gacatggcag tatccttctg gtgggaggga gtcaccattt gctctgcct
180
gcccctctgct gggtgcttt acaggtgcta ctgcacatccag cgcttgaaac aattctgtgg
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ggtatttgatt ctgaagagat cactgatggc cgtgatttct tgcctcagct tacccagat
299

<210> 2788
<211> 95
<212> PRT

<213> Homo sapiens

<400> 2788

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							10							15	
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							20		25					30	
Ala	Gly	His	Ala	Thr	Met	His	Arg	His	Gly	Ser	Ile	Leu	Leu	Val	Gly
							35		40					45	
Gly	Ser	His	His	Leu	Leu	Cys	Pro	Ala	Leu	Cys	Trp	Val	Leu	Leu	Gln
							50		55					60	
Val	Leu	Leu	His	Pro	Ala	Leu	Glu	Thr	Ile	Leu	Trp	Gly	Ile	Asp	Ser
							65		70					80	
Glu	Glu	Ile	Thr	Asp	Gly	Arg	Asp	Phe	Leu	Pro	Gln	Leu	Thr	Gln	
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<210> 2789

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2789

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120					
gcgaggccag	gctgtgcagt	ggggccagca	ccagctgcag	cttctccctcc	agcaggtcca
180					
ccctggactg	cagcctctgc	acttcttcct	tcattgcact	gtccactcct	gccccggcagag
240					
ccaggcgctg	ggtcacggcc	ggccgggetcc	ccacccacac	ccccagggct	ccctccctgtc
300					
cccagggaga	ggcagagcca	gaagactcag	gcccaggcct	ctgccacccc	cgctgcctgc
360					
ctggcgctgg	ccagaggctct	caggctatgc	cgcctaagta	cgtcggggcg	ggtggctctg
420					
cgcagaggct	cagggtcccc	gccacgctga	gggaggtcaa	ggctgaggtc	tcagcggccc
480					
tcgttccgaa	tt				
492					

<210> 2790

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2790

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								10						15		
Ser	Ala	Pro	Gly	Gly	Cys	Arg	Gly	Pro	Gly	Ala	His	Ala	Pro	Val	Pro	
							20		25					30		
Ala	Arg	Pro	Gly	Cys	Ala	Val	Gly	Pro	Ala	Pro	Ala	Ala	Ser	Pro		
							35		40					45		
Pro	Ala	Gly	Pro	Pro	Trp	Thr	Ala	Ala	Ser	Ala	Leu	Leu	Pro	Ser	Leu	

50	55	60
His Cys Pro Leu Leu Arg Ala Glu Pro Gly Ala Gly Ser Arg Pro Ala		
65	70	75
Gly Ser Pro Pro Thr Pro Pro Gly Leu Pro Pro Val Pro Arg Glu Arg		80
85	90	95
Gln Ser Gln Lys Thr Gln Ala Gln Ala Ser Ala Thr Pro Ala Ala Cys		
100	105	110
Leu Ala Leu Ala Arg Gly Leu Arg Leu Cys Arg Leu Ser Thr Ser Gly		
115	120	125
Arg Val Ala Leu Arg Arg Gly Ser Gly Ser Arg Pro Arg		
130	135	140

<210> 2791

<211> 1271

<212> DNA

<213> Homo sapiens

<400> 2791

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120
ccaaattccc atttttcttc caatcacatt taaaatttca atatgttgc ggcagtatgt
180
gtaagattat atccaaatat ttactcctgg ttgctctct tgggcaagct gtgaatatga
240
tcaaaatatt taaagaagga agaaggtaaa gatctaaaat atgacatgaa aataccaga
300
360
gaagtgtgcc taaatttagca ttagggtttg agggatccta aggtgacaa aaaggactc
420
ttctattgaa ttctgtggttt atgctcagcg atagtaacaa tcctgcctcc cctaacatct
480
tcctccccctt ccagcagctt cacagaacat ggttgatgag gtaacttagg ggtgcacag
540
560
ggtgtggcca gaagacccct ttccctatacg accactatga gccctgaaag atttatgagg
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taatgttcac ttcatcctgt gcttctttc ctagatgtga actatgaaga cttaactttc
660
accataccag atgttagagga ctcaagtcag agaccagatc agggacccca gagacctct
720
780
cctgaaggac tcctacctag accccctggat gatagtggta accaagatga tggtcctcag
840
cagagaccac caaaaccagg aggccatcac cgccatcctc cccccacccctcc ttttcaaaat
900
960
cagcaacgac caccccaacg aggacaccgt caactctctc taccccgatt tccttctgtc
990
agcctgcagg aagcatcatc attcttccgg agggacagac cagcaagaca tccccaggag
1020
1080
caaccactct ggtatcttag aattcagtgg cagaaaataa ataagaagat aacttccttc
agaaaaggccat gacattgaaa taatgtggc ataactcttt cttcagtata ccaataaaat
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gtaacaggg a gaggagaggg tgcgtccatca agaggcaaca tggagggtgtt tcaaaccat
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 1260
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<210> 2792
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 2792
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 Phe Thr Phe Thr Ile Pro Asp Val Glu Asp Ser Ser Gln Arg Pro Asp
 20 25 30
 Gln Gly Pro Gln Arg Pro Pro Glu Gly Leu Leu Pro Arg Pro Pro
 35 40 45
 Gly Asp Ser Gly Asn Gln Asp Asp Gly Pro Gln Gln Arg Pro Pro Lys
 50 55 60
 Pro Gly Gly His His Arg His Pro Pro Pro Pro Phe Gln Asn Gln
 65 70 75 80
 Gln Arg Pro Pro Gln Arg Gly His Arg Gln Leu Ser Leu Pro Arg Phe
 85 90 95
 Pro Ser Val Ser Leu Gln Glu Ala Ser Ser Phe Phe Arg Arg Asp Arg
 100 105 110
 Pro Ala Arg His Pro Gln Glu Gln Pro Leu Trp
 115 120

<210> 2793
 <211> 847
 <212> DNA
 <213> Homo sapiens

<400> 2793
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 180
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 240
 gagggcccg aggagccgc ttctgcctca gaacggcgtg actcggagaa ttggagcg
 300
 attcagtata ttaatgtctt attgataatg gcagaacatc caccactact ggatacaact
 360
 cagatctaa gtagtgatat ttctctttg tctgcctca ttgttaagtgc agatggaaaca
 420
 caacaggtt a ttctggta a gttttttttt ggagaagcat ttacaataag aagagaagat
 480

ggcagtttc agtgcattac aggtcctgct caggccaa tgatgtcccc aaatggttct
540
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600
cgaagagttg tcgtggtccc tcaggcacca gagtttcacc ctggtagtca cacagttctc
660
caccgttctc cacatcctcc tctacctggt ttcattcctg tcccaactat gatgccgcct
720
caccacgtca tatgtactca cccgtgactg gagctggaga catgacaaca cagtatatgc
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<210> 2794
<211> 139
<212> PRT
<213> *Homo sapiens*

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<400> 2794
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      20          25          30
Gln Val Ile Leu Val Gln Val Asn Pro Gly Glu Ala Phe Thr Ile Arg
      35          40          45
Arg Glu Asp Gly Gln Phe Gln Cys Ile Thr Gly Pro Ala Gln Val Pro
      50          55          60
Met Met Ser Pro Asn Gly Ser Val Pro Pro Ile Tyr Val Pro Pro Gly
      65          70          75          80
Tyr Ala Pro Gln Val Ile Glu Asp Asn Gly Val Arg Arg Val Val Val
      85          90          95
Val Pro Gln Ala Pro Glu Phe His Pro Gly Ser His Thr Val Leu His
      100         105         110
Arg Ser Pro His Pro Pro Leu Pro Gly Phe Ile Pro Val Pro Thr Met
      115         120         125
Met Pro Pro His His Val Ile Cys Thr His Pro
      130         135

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<210> 2795
<211> 1022
<212> DNA
<213> *Homo sapiens*

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gcctggcagc tgctggttgt ggaatagttc tggatgccaa tctcctccag gtcctgcgg  
180  
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240
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 720
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 900
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 1022

<210> 2796
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 2796
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 Pro Lys Val Ala Glu Glu Gly Val Ser Ser Met Ser Pro Gly Ala Ser
 20 25 30
 Gly Glu Ala Glu Val Leu Glu Pro Arg Gly Ser Ser Ser Gly Cys
 35 40 45
 Ser Ala Pro Leu Gly Ala Val Val
 50 55

<210> 2797
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 2797
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 120

ctgaactcca tcagcgagtc cccgcattgag cgcatgcacc cctacatcga gctggcctgg
 180
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<210> 2798
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2798
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 Glu Ala Val Ser Asn Ile His Asn Leu Asn Ser Ile Ser Glu Ser Pro
 35 40 45
 His Glu Arg Met His Pro Tyr Ile Glu Leu Ala Trp Gly Phe Ser Thr
 50 55 60
 Val Leu Gly Ile Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp
 65 70 75 80
 Ile Lys Phe Leu Pro Val Asp Ala Arg Arg Gln Pro Gly Pro Pro Pro
 85 90 95
 Gly Pro Gly Ser His Thr Gly Trp Gln Ala Ala Leu Val Ser Thr Ile
 100 105 110
 Ile Met Val Pro Val Gly Leu Ile Phe Val Val Phe Thr Ile His Phe
 115 120 125
 Tyr Arg Ser Leu Val Arg His Lys Thr Glu Arg His Asn Arg Glu Ile
 130 135 140
 Glu Glu Leu His Lys Leu Lys Val Gln Leu Asp Gly His Glu
 145 150 155

<210> 2799
 <211> 2872
 <212> DNA
 <213> Homo sapiens

<400> 2799
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 2340
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 2640
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 2700
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 2760
 aataggtaaa ttgacaagaa gtatTTATTG ttttccata ttgctttatt gccttccttg
 2820
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 2872

<210> 2800

<211> 294

<212> PRT

<213> Homo sapiens

<400> 2800

Met	Ser	Pro	Phe	Leu	Phe	Cys	Cys	Met	Met	Val	Gly	Gly	Gly	Glu	Asp
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Thr	Phe	Met	Ala	Ser	Pro	Tyr	Lys	Pro	Glu	Ile	Ser	Arg	Glu	Gln	Ala
	20							25						30	
Ile	Ala	Leu	Leu	Lys	Asp	Gln	Glu	Pro	Gly	Ala	Phe	Ile	Ile	Arg	Asp
	35							40						45	
Ser	His	Ser	Phe	Arg	Gly	Ala	Tyr	Gly	Leu	Ala	Met	Lys	Val	Ser	Ser
	50							55						60	
Pro	Pro	Pro	Thr	Ile	Met	Gln	Gln	Asn	Lys	Lys	Gly	Asp	Met	Thr	His
65								70			75			80	
Glu	Leu	Val	Arg	His	Phe	Leu	Ile	Glu	Thr	Gly	Pro	Arg	Gly	Val	Lys
	85							90						95	
Leu	Lys	Gly	Cys	Pro	Asn	Glu	Pro	Asn	Phe	Gly	Ser	Leu	Ser	Ala	Leu

100	105	110
Val Tyr Gln His Ser Ile Ile Pro Leu Ala Leu Pro	Cys Lys Leu Val	
115	120	125
Ile Pro Asn Arg Asp Pro Thr Asp Glu Ser Lys Asp	Ser Ser Gly Pro	
130	135	140
Ala Asn Ser Thr Ala Asp Leu Leu Lys Gln Gly Ala	Ala Cys Asn Val	
145	150	155
Leu Phe Ile Asn Ser Val Asp Met Glu Ser Leu Thr	Gly Pro Gln Ala	
165	170	175
Ile Ser Lys Ala Thr Ser Glu Thr Leu Ala Ala Asp	Pro Thr Pro Ala	
180	185	190
Ala Thr Ile Val His Phe Lys Val Ser Ala Gln Gly	Ile Thr Leu Thr	
195	200	205
Asp Asn Gln Arg Lys Leu Phe Phe Arg Arg His Tyr	Pro Leu Asn Thr	
210	215	220
Val Thr Phe Cys Asp Leu Asp Pro Gln Glu Arg Lys	Trp Met Lys Thr	
225	230	235
Glu Gly Gly Ala Pro Ala Lys Leu Phe Gly Phe Val	Ala Arg Lys Gln	
245	250	255
Gly Ser Thr Thr Asp Asn Ala Cys His Leu Phe Ala	Glu Leu Asp Pro	
260	265	270
Asn Gln Pro Ala Ser Ala Ile Val Asn Phe Val Ser	Lys Val Met Leu	
275	280	285
Asn Ala Gly Gln Lys Arg		
290		

<210> 2801

<211> 549

<212> DNA

<213> Homo sapiens

<400> 2801

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300
ctggcattaa cagtgcgttgc gacatgtgtg aagaactgtg gccaccgctt ccacatcctt
360
gtggccaaacc gagatttcat cgacagtgtt ctggtaaaa ttatatctcc caagaacaac
420
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549

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<210> 2802

<211> 151

<212> PRT

<213> Homo sapiens

<400> 2802

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															20
Asn	Met	Glu	Ile	Cys	Asp	Ile	Ile	Asn	Glu	Thr	Glu	Glu	Gly	Pro	Lys
															35
Asp	Ala	Ile	Arg	Ala	Leu	Lys	Lys	Arg	Leu	Asn	Gly	Asn	Arg	Asn	Tyr
															50
Arg	Glu	Val	Met	Leu	Ala	Leu	Thr	Val	Leu	Glu	Thr	Cys	Val	Lys	Asn
															65
Cys	Gly	His	Arg	Phe	His	Ile	Leu	Val	Ala	Asn	Arg	Asp	Phe	Ile	Asp
															85
Ser	Val	Leu	Val	Lys	Ile	Ile	Ser	Pro	Lys	Asn	Asn	Pro	Pro	Thr	Ile
															100
Val	Gln	Asp	Lys	Val	Leu	Ala	Leu	Ile	Gln	Ala	Trp	Ala	Asp	Ala	Phe
															115
Arg	Ser	Ser	Pro	Asp	Leu	Thr	Gly	Val	Val	His	Ile	Tyr	Glu	Glu	Leu
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Lys	Arg	Lys	Gly	Val	Glu	Phe									145
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<210> 2803

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2803

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120					
ccgcccgccg	tagggtgtgt	gctgtccggg	ctcacgggga	ccctgtctcc	gagtcgttcg
180					
tgcagcgtgt	gtaccagccc	ttcctcacca	cctgcgacgg	gcacccggcc	tgcagcacct
240					
accgcaatat	gccagccgcc	atgccggAAC	ggagggagct	gtgtccagcc	tggccgctgc
300					
cgtgccttg	caggatggcg	gggtgacact	tgccagtcag	atgtggacna	gtgcaatgaa
360					
ggaagaagtg	cagaggctgc	agtccagggt	ggacctgctg	gaggagaagc	tgcagctgg
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459					

<210> 2804

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2804

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 20 25 30
 Val Arg Gly Met Thr Asp Ser Pro Pro Pro Ala Val Gly Cys Val Leu
 35 40 45
 Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys
 50 55 60
 Thr Ser Pro Ser Ser Pro Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro
 65 70 75 80
 Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Ser Cys Val Gln
 85 90 95
 Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln
 100 105 110
 Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val
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 Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr
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 Ala Gln Pro Gly Leu Ala Gly Thr Gly
 145 150

<210> 2805

<211> 771
<212> DNA
<213> Homo sapiens

<400> 2805

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 120
 gatctctgga atagctacca ggcaaagaaa aaaactatgg atgccaagaa tggccagaca
 180
 atgaatgaga agcaactctt ccatggaca gatgccggct ccgtgccaca cgtcaatcga
 240
 aatggcttta accgcagcta tgccggaaag aatgctgtgg catatggaaa gggAACCTAT
 300
 tttgctgtca atgccaatta ttctgccaat gatacgtact ccagaccaga tgcaaATGGG
 360
 agaaaAGCATG TGTATTATGT GCGAGTACTT ACTGGAATCT ATACACATGG AAATCATTCA
 420
 TTAATTGTGC CTCCCTCAAA GAACCCTCAA AATCCTACTG ACCTGTATGA CACTGTACACA
 480
 GATAATGTGC ACCATCCAAG TTTATTGTG GCATTTATG ACTACCAAGC ATACCCAGAG
 540
 TACCTTATTA CGTTAGAAA ATAACACTT GGTATCCTTC CCACAAAATT ATTCTCCATT
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 TGTACATATC TAGTTGTAAG ACAAGTTTA GCTTTTTTT TTAATTCTTC TTAACAGATT
 660
 TTTCTAATAT CCAAGGATCA TTCTTGTCG CTGCAGTCAG ATCTTCTTC AGCTTCTTCTT
 720
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<210> 2806

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2806

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      20          25          30
Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala
      35          40          45
Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys
      50          55          60
Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg
      65          70          75          80
Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly
      85          90          95
Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr
      100         105         110
Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg
      115         120         125
Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro
      130         135         140
Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr
      145         150         155          160
Asp Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln
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Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys
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<210> 2807

<211> 1660

<212> DNA

<213> Homo sapiens

<400> 2807

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cccaggtgct cagggccgcc tgtgaatgca ggtgccttgt cccaaacaga ggacatatttt
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240
aagaaggaa attataagtgg agtagcagtt tgtgaatctg gagtccttgg ttcaatcaca
300
gaacaagtag ggagagggagc caggacctag gccttcaggt tttcagcaag gaaggactct
360
caggccatcc ttgcagttca gttaacagga ggaagcaagg atccccagag agctggagta
420
ctctgactct cgatagaaaa ggcaggacaa tcggagcctg gggttcacgt gagtcaggaa
480

agggagctct ccacactgga atcgctgttag ccgaggaggt tctaattggga cgatcttcga
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 780
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 900
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 960
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 1020
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 1080
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 1140
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 1200
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 1380
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 1500
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 1560
 agcggggcca ggagctacga gtcggcacac ctgtcccgaa tgcaagaact caaaccagcg
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<210> 2808
 <211> 390
 <212> PRT
 <213> Homo sapiens

<400> 2808
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 Leu Glu Leu Glu Ser Ser Gln Asp Ile Gln Asp Val Leu Asp Ala Asn
 35 40 45
 Lys Ser Leu Pro Glu Ser Ser Leu Thr Asp Leu Leu Ser Asp Asn Phe

50	55	60
Thr Asp Ser Leu Val Ser Phe Ser Ala Glu Ile Leu Ser Arg Thr Leu		
65	70	75
Cys Glu Pro Leu Val Ala Ser Leu Trp Met Lys Leu Gly Asn Thr Gly		
85	90	95
Ala Met Arg Arg Cys Val Lys Leu Thr Val Ala Leu Glu Thr Ala Glu		
100	105	110
Cys Glu Phe Pro Pro His Leu Asp Val Tyr Ile Glu Asp Pro His Leu		
115	120	125
Pro Pro Ser Leu Gly Leu Leu Pro Gly Ala Arg Val His Phe Ser Gln		
130	135	140
Leu Glu Lys Arg Val Ser Arg Ser His Asn Val Tyr Cys Cys Phe Arg		
145	150	155
Ser Ser Thr Tyr Val Gln Val Leu Ser Phe Pro Pro Glu Thr Thr Ile		
165	170	175
Ser Val Pro Leu Pro His Ile Tyr Leu Ala Glu Leu Leu Gln Gly Gly		
180	185	190
Gln Ser Pro Phe Gln Ala Thr Ala Ser Cys His Ile Val Ser Val Phe		
195	200	205
Ser Leu Gln Leu Phe Trp Val Cys Ala Tyr Cys Thr Ser Ile Cys Arg		
210	215	220
Gln Gly Lys Cys Thr Arg Leu Gly Ser Thr Cys Pro Thr Gln Thr Ala		
225	230	235
Ile Ser Gln Ala Ile Ile Arg Leu Leu Val Glu Asp Gly Thr Ala Glu		
245	250	255
Ala Val Val Thr Cys Arg Asn His His Val Ala Ala Leu Gly Leu		
260	265	270
Cys Pro Arg Glu Trp Ala Ser Leu Leu Asp Phe Val Gln Val Pro Gly		
275	280	285
Arg Val Val Leu Gln Phe Ala Gly Pro Gly Ala Gln Leu Glu Ser Ser		
290	295	300
Ala Arg Val Asp Glu Pro Met Thr Met Phe Leu Trp Thr Leu Cys Thr		
305	310	315
Ser Pro Ser Val Leu Arg Pro Ile Val Leu Ser Phe Glu Leu Glu Arg		
325	330	335
Lys Pro Ser Lys Ile Val Pro Leu Glu Pro Pro Arg Leu Gln Arg Phe		
340	345	350
Gln Cys Gly Glu Leu Pro Phe Leu Thr His Val Asn Pro Arg Leu Arg		
355	360	365
Leu Ser Cys Leu Ser Ile Arg Glu Ser Glu Tyr Ser Ser Ser Leu Gly		
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Ile Leu Ala Ser Ser Cys		
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<210> 2809

<211> 1502

<212> DNA

<213> Homo sapiens

<400> 2809

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 120

actgttaagc gctggcccag tccccccacc ccacccagcc gtgtactgcc tgggetcccc
180
tcaaaggaa attttacgg aaacatcttgc agcaagtgc aaaaagatc tatggccat
240
gaaccaactg aaaactccaa gaaccctcttgc tctgcctcttgc ccagcagcga gtcctaagcg
300
cagaatccag agctcgttagc tgccctcagc tgtaactact gttcagaat gttgctgctg
360
catacattttgc tcatgtcagc cagccagctc cgtgggtgag agtgtgcgtg tgccgtgtc
420
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720
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<210> 2810
<211> 102
<212> PRT
<213> Homo sapiens

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 35 40 45
 Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys
 50 55 60
 Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys
 65 70 75 80
 Val Cys Val Cys Ala Arg Ala Cys Thr Ser Pro Pro Glu His Leu Gly
 85 90 95
 Phe Gly Thr Arg Trp Phe
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<210> 2811

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2811
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<210> 2812

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2812
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 Pro Ala Pro Ala Val Asp Glu Pro Gln Pro Xaa Ser Gln Ala Pro Pro

35	40	45
Gly Pro Arg Val Pro Gly Pro Pro Arg Pro Trp	Gly Ala Ala Pro Leu	
50	55	60
Arg Pro Arg Pro Gly Glu Gly Asp Pro Val Thr Arg Glu Arg Ser Pro		
65	70	75
Val Pro Gly Ala Thr Glu Met Pro Pro Arg Pro Lys Val Pro Ala		
85	90	95
Pro Pro Gly Pro Thr Gly Arg Ser Pro Arg Ala Ala Val Gly His His		
100	105	110
Arg Ala Ala Gly Pro Pro Gly Cys Val Gly Pro Ser Leu Ser Gly Gln		
115	120	125
Leu Gly Ser		
130		

<210> 2813

<211> 2417

<212> DNA

<213> Homo sapiens

<400> 2813

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180
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720
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780
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1020

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2280
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<210> 2814
<211> 471
<212> PRT
<213> Homo sapiens

<400> 2814
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 Trp Lys Glu Leu Ser Leu Lys Tyr Lys Gln Ser Phe Gln Glu Ala Arg
 35 40 45
 Asp Glu Leu Val Glu Phe Gln Glu Gly Ser Arg Glu Leu Glu Ala Glu
 50 55 60
 Leu Glu Ala Gln Leu Val Gln Ala Glu Gln Arg Asn Arg Asp Leu Gln
 65 70 75 80
 Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys
 85 90 95
 Leu Glu His Gln Tyr Ala Gln Ser Tyr Lys Gln Val Ser Val Leu Glu
 100 105 110
 Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr
 115 120 125
 Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg
 130 135 140
 Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile
 145 150 155 160
 Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu
 165 170 175
 Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln
 180 185 190
 Glu Leu Ala Val Arg Glu Arg Gln Glu Val Thr Arg Lys Ser Ala
 195 200 205
 Pro Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln
 210 215 220
 Ala Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn
 225 230 235 240
 Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro
 245 250 255
 Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu
 260 265 270
 Leu Arg Lys Val Gly Ala Leu Glu Ser Lys Leu Ala Ala Cys Arg Asn
 275 280 285
 Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val
 290 295 300
 Asn Cys Gly Val Leu Asn Gly Asn Gly Thr Lys Phe Ser Arg Ser Gly
 305 310 315 320
 His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala
 325 330 335
 Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly
 340 345 350
 Met Cys Leu Ser Val Cys Glu Cys Leu Ala Ser Arg Gly Ala Pro Ala
 355 360 365
 Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly
 370 375 380
 Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala
 385 390 395 400
 Gly Cys Met Gln Trp Arg Leu Leu Gly Pro Ala Gln Pro Arg Asn Ser
 405 410 415
 Ala Arg Tyr Gln Tyr Trp Leu Phe Ser Leu Leu Ala Val Val Pro Leu

420	425	430
Val Ser His Asp Cys Thr Phe Val Gly Arg Lys Val Ile His Thr Cys		
435	440	445
Ile Thr Trp Ser Leu Asp Ala Glu Val Pro Ile His His Thr Cys Pro		
450	455	460
Ile Ala Pro Thr Leu Leu Tyr		
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<210> 2815

<211> 1421

<212> DNA

<213> Homo sapiens

<400> 2815

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 420
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 840
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 1320
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 1421

<210> 2816

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2816

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			20					25						30	
Val	Arg	Ala	His	Gly	Asp	Pro	Val	Ser	Glu	Ser	Phe	Val	Gln	Arg	Val
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Tyr	Gln	Pro	Phe	Leu	Thr	Thr	Cys	Asp	Gly	His	Arg	Ala	Cys	Ser	Thr
								50			55			60	
Tyr	Arg	Thr	Ile	Tyr	Arg	Thr	Ala	Tyr	Arg	Arg	Ser	Pro	Gly	Leu	Ala
65								65			70			75	80
Pro	Ala	Arg	Pro	Arg	Tyr	Ala	Cys	Cys	Pro	Gly	Trp	Lys	Arg	Thr	Ser
								85			90			95	
Gly	Leu	Pro	Gly	Ala	Cys	Gly	Ala	Ala	Ile	Cys	Gln	Pro	Pro	Cys	Arg
								100			105			110	
Asn	Gly	Gly	Ser	Cys	Val	Gln	Pro	Gly	Arg	Cys	Arg	Cys	Pro	Ala	Gly
								115			120			125	
Trp	Arg	Gly	Asp	Thr	Cys	Gln	Ser	Asp	Val	Asp	Glu	Cys	Ser	Ala	Arg
								130			135			140	
Arg	Gly	Gly	Cys	Pro	Gln	Arg	Cys	Val	Asn	Thr	Ala	Gly	Ser	Tyr	Trp
145								145			150			155	160
Cys	Gln	Cys	Trp	Glu	Gly	His	Ser	Leu	Ser	Ala	Asp	Gly	Thr	Leu	Cys
								165			170			175	
Val	Pro	Lys	Gly	Gly	Pro	Pro	Arg	Val	Ala	Pro	Asn	Pro	Thr	Gly	Val
								180			185			190	
Asp	Ser	Ala	Met	Lys	Glu	Glu	Val	Gln	Arg	Leu	Gln	Ser	Arg	Val	Asp
								195			200			205	
Leu	Leu	Glu	Lys	Leu	Gln	Leu	Val	Leu	Ala	Pro	Leu	His	Ser	Leu	
								210			215			220	
Ala	Ser	Gln	Ala	Gly	Ala	Trp	Ala	Pro	Gly	Pro	Arg	Gln	Pro	Pro	Gly
								225			230			235	240
Ala	Leu	Leu	Pro	Ala	Ala	Arg	Pro	His	Arg	Leu	Pro	Glu	Arg	Ala	Asp
								245			250			255	
Phe	Leu	Pro	Gly	Gly	Ala	Ala	Gly	Val	Leu	Leu	Leu	Gln	Glu	Arg	Leu
								260			265			270	
Xaa	Asp	Cys	Pro	Ala	Pro	Gln	Ala	Gly	Leu	Ser	Pro	Ser	Arg	Arg	Pro
								275			280			285	
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Arg	Gly	Asp													

305

<210> 2817
<211> 219
<212> DNA
<213> Homo sapiens

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120
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219

<210> 2818
<211> 73
<212> PRT
<213> Homo sapiens

<400> 2818
Xaa Gly Phe Ser Val Ser Leu Ser Phe Phe Leu Val Asp His Glu Leu
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20 25 30
Pro Gly Ala Ser Leu Gly Pro Gly Val Leu Leu Arg Ala Glu Phe His
35 40 45
Gln His Gln His Thr His Gln His Thr His Gln His Thr His Gln His
50 55 60
Gln His Thr Phe Ala Pro Phe Thr Arg
65 70

<210> 2819
<211> 730
<212> DNA
<213> Homo sapiens

<400> 2819
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120
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180
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240
ttcgacacgg agttcgtgaa cctctacgac cacttcaaca tggccaccgg caagttctac
300
tgctacgtgc ccggcctcta cttttcagc ctcaacgtgc acacctggaa ccagaaggag
360
acctacactgc acatcatgaa gaacgaggag gaggtggta tcttggcgc gcaggtggc
420

gaccgcagca tcatgcaaag ccagagcctg atgctggagc tgcgagagca ggaccaggta
 480
 tgggtacgcc tctacaaggg cgaacgtgag aacgccatct tcagcgagga gctggacacc
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 600
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 720
 gccaaagcga
 730

<210> 2820
 <211> 195
 <212> PRT
 <213> Homo sapiens

<400> 2820
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 20 25 30
 Ser Ala Gly Ala Arg Gly His Thr Gly Pro Lys Gly Gln Lys Gly Ser
 35 40 45
 Met Gly Ala Pro Gly Glu Arg Cys Lys Ser His Tyr Ala Ala Phe Ser
 50 55 60
 Val Gly Arg Glu Ala His Ala Gln Gln Pro Leu Leu Pro Asp Val Ile
 65 70 75 80
 Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp His Phe Asn Met Phe Thr
 85 90 95
 Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu Tyr Phe Phe Ser Leu Asn
 100 105 110
 Val His Thr Trp Asn Gln Lys Glu Thr Tyr Leu His Ile Met Lys Asn
 115 120 125
 Glu Glu Glu Val Val Ile Leu Phe Ala Gln Val Gly Asp Arg Ser Ile
 130 135 140
 Met Gln Ser Gln Ser Leu Met Leu Glu Leu Arg Glu Gln Asp Gln Val
 145 150 155 160
 Trp Val Arg Leu Tyr Lys Gly Glu Arg Glu Asn Ala Ile Phe Ser Glu
 165 170 175
 Glu Leu Asp Thr Tyr Ile Thr Phe Ser Gly Tyr Leu Val Lys His Ala
 180 185 190
 Thr Glu Pro
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<210> 2821
 <211> 1746
 <212> DNA
 <213> Homo sapiens

<400> 2821
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120
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180
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240
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300
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360
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420
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480
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540
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600
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660
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720
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840
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1320
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1380
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1440
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1500
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1560
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 1740
 cctagg
 1746

<210> 2822
 <211> 424
 <212> PRT
 <213> Homo sapiens

<400> 2822
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 20 25 30
 Leu Ser Asn Ile Ile Asn Lys Leu Leu Glu Thr Lys Asn Glu Leu His
 35 40 45
 Lys His Val Glu Phe Asp Phe Leu Ile Lys Gly Gln Phe Leu Arg Met
 50 55 60
 Pro Leu Asp Lys His Met Glu Met Glu Asp Ile Ser Ser Glu Glu Val
 65 70 75 80
 Val Glu Ile Glu Tyr Val Glu Lys Tyr Thr Ala Pro Gln Pro Glu Gln
 85 90 95
 Cys Met Phe His Asp Asp Trp Ile Ser Ser Ile Lys Gly Ala Glu Glu
 100 105 110
 Trp Ile Leu Thr Gly Ser Tyr Gly Lys Thr Ser Arg Ile Trp Ser Leu
 115 120 125
 Glu Gly Lys Ser Ile Met Thr Ile Val Gly His Thr Asp Val Val Lys
 130 135 140
 Asp Val Ala Trp Val Lys Lys Asp Ser Leu Ser Cys Leu Leu Xaa Glu
 145 150 155 160
 Cys Phe Tyr Gly Ser Asp Tyr Ser Leu Met Gly Val Glu Cys Arg Glu
 165 170 175
 Lys Gln Ser Glu Ser Pro Thr Leu Leu Xaa Arg Gly His Ala Gly Ser
 180 185 190
 Val Asp Ser Ile Ala Val Asp Gly Ser Gly Thr Lys Phe Cys Ser Gly
 195 200 205
 Ser Trp Asp Lys Met Leu Lys Ile Trp Ser Thr Val Pro Thr Asp Glu
 210 215 220
 Glu Asp Glu Met Glu Glu Ser Thr Asn Arg Pro Arg Lys Lys Gln Lys
 225 230 235 240
 Thr Glu Gln Leu Gly Leu Thr Arg Thr Pro Ile Val Thr Leu Ser Gly
 245 250 255
 His Met Glu Ala Val Ser Ser Val Leu Trp Ser Asp Ala Glu Glu Ile
 260 265 270
 Cys Ser Ala Ser Trp Asp His Thr Ile Arg Val Trp Asp Val Glu Ser
 275 280 285
 Gly Ser Leu Lys Ser Thr Leu Thr Gly Asn Lys Val Phe Asn Cys Ile
 290 295 300
 Ser Tyr Ser Pro Leu Cys Lys Arg Leu Ala Ser Gly Ser Thr Asp Arg
 305 310 315 320
 His Ile Arg Leu Trp Asp Pro Arg Thr Lys Asp Gly Ser Leu Val Ser
 325 330 335
 Leu Ser Leu Thr Ser His Thr Gly Trp Val Thr Ser Val Lys Trp Ser

340	345	350
Pro Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val		
355	360	365
Lys Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala		
370	375	380
Ala His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu		
385	390	395
Leu Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser		400
405	410	415
Pro Thr Thr Ser His Val Gly Ala		
420		

<210> 2823

<211> 461

<212> DNA

<213> Homo sapiens

<400> 2823

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461

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<210> 2824

<211> 81

<212> PRT

<213> Homo sapiens

<400> 2824

Met Cys Val Ser Pro Ser Ser Pro Cys Pro Arg Gly Phe Ala Trp Leu		
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Asp Gln Val Pro Ser Ser Ser Leu Ala Pro Gln Ser His Trp Glu Thr		15
20	25	30
Leu Gln Ala Gln Ala His Thr Gly Pro Ala Ser Pro Ala Ala Leu Pro		
35	40	45
Lys Gly Asp Ala Cys Asp Cys Val Cys Leu Pro Thr Gly Val Thr Thr		
50	55	60
His Pro Arg Pro Pro Glu Pro Gln His Glu Gly Ser Ala Pro Phe Pro		
65	70	75
His		80

<210> 2825 .
<211> 1520
<212> DNA
<213> Homo sapiens

<400> 2825
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120 gatggacatg tagaggtggc acgtttgctt ttggatagtg gtgctcaagt gaacatgcct
180 gcagattcat ttgaatctcc attgacgcta gctgcctgtg gaggacatgt tgaattggca
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780 tgtactgttc agttcttaat tagtaaagga gccaatgtga atagaaccac agctaataat
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1380 accaaggaga agatcgagga gctcaacaaa acaaggggagg aacaaattca gaagaaacaa
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 1520

<210> 2826
<211> 506
<212> PRT
<213> Homo sapiens

<400> 2826
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Thr Ala Leu Met Glu Ala Cys Met Asp Gly His Val Glu Val Ala Arg
 35 40 45
Leu Leu Leu Asp Ser Gly Ala Gln Val Asn Met Pro Ala Asp Ser Phe
 50 55 60
Glu Ser Pro Leu Thr Leu Ala Ala Cys Gly Gly His Val Glu Leu Ala
 65 70 75 80
Ala Leu Leu Ile Glu Arg Gly Ala Asn Leu Glu Glu Val Asn Asp Glu
 85 90 95
Gly Tyr Thr Pro Leu Met Glu Ala Ala Arg Glu Gly His Glu Glu Met
 100 105 110
Val Ala Leu Leu Leu Ser Thr Arg Ser Xaa Ile Ser Met His Arg Gln
 115 120 125
Lys Lys Leu Lys Lys Leu Leu Thr Leu Ala Cys Cys Gly Gly Phe
 130 135 140
Leu Glu Val Ala Asp Phe Leu Ile Lys Ala Gly Ala Asp Ile Glu Leu
 145 150 155 160
Gly Cys Ser Thr Pro Leu Met Glu Ala Ala Gln Glu Gly His Leu Glu
 165 170 175
Leu Val Lys Tyr Leu Leu Ala Ala Gly Ala Asn Val His Ala Thr Thr
 180 185 190
Ala Thr Gly Asp Thr Ala Leu Thr Tyr Ala Cys Glu Asn Gly His Thr
 195 200 205
Asp Val Ala Asp Val Leu Leu Gln Ala Gly Ala Asp Leu Asp Lys Gln
 210 215 220
Glu Asp Met Lys Thr Ile Leu Glu Gly Ile Asp Pro Ala Lys His Leu
 225 230 235 240
Glu His Glu Ser Glu Gly Gly Arg Thr Pro Leu Met Lys Ala Ala Arg
 245 250 255
Ala Gly His Val Cys Thr Val Gln Phe Leu Ile Ser Lys Gly Ala Asn
 260 265 270
Val Asn Arg Thr Thr Ala Asn Asn Asp His Thr Val Leu Ser Leu Ala
 275 280 285
Cys Ala Gly Gly His Leu Ala Val Val Glu Leu Leu Ala His Gly
 290 295 300
Ala Asp Pro Thr His Arg Leu Lys Asp Gly Ser Thr Met Leu Ile Glu
 305 310 315 320
Ala Ala Lys Gly Gly His Thr Ser Val Val Cys Tyr Leu Leu Asp Tyr
 325 330 335
Pro Asn Asn Leu Leu Ser Ala Pro Pro Pro Asp Val Thr Gln Leu Thr

340	345	350
Pro Pro Ser His Asp Leu Asn Arg Ala Pro Arg Val Pro Val Gln Ala		
355	360	365
Leu Pro Met Val Val Pro Pro Gln Glu Pro Asp Lys Pro Pro Ala Asn		
370	375	380
Val Ala Thr Thr Leu Pro Ile Arg Asn Lys Ala Ala Ser Lys Gln Lys		
385	390	395
Ser Ser Ser His Leu Pro Ala Asn Ser Gln Asp Val Gln Gly Tyr Ile		
405	410	415
Thr Asn Gln Ser Pro Glu Ser Ile Val Glu Glu Ala Gln Gly Lys Leu		
420	425	430
Thr Glu Leu Glu Gln Arg Ile Lys Glu Ala Ile Glu Lys Asn Ala Gln		
435	440	445
Leu Gln Ser Leu Glu Leu Ala His Ala Asp Gln Leu Thr Lys Glu Lys		
450	455	460
Ile Glu Glu Leu Asn Lys Thr Arg Glu Glu Gln Ile Gln Lys Lys Gln		
465	470	475
Lys Ile Leu Glu Glu Leu Gln Lys Val Glu Arg Glu Leu Gln Leu Lys		
485	490	495
Thr Gln Gln Gln Leu Lys Lys Gln Tyr Leu		
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<210> 2827

<211> 481

<212> DNA

<213> Homo sapiens

<400> 2827

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120
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180
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240
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360
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481

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<210> 2828

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2828

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Ser Cys Leu Arg Ser Leu Val Leu Lys Arg Gly Gln Arg Arg Asp Thr			
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Leu Gly Ala Cys Leu Arg Gly Ala Leu Thr Asn Leu Pro Ala Gly Leu			
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Ser Gly Leu Ala His Leu Ala His Leu Asp Leu Ser Phe Asn Ser Leu			
115	120	125	
Glu Thr Leu Pro Ala Cys Val Leu Gln Met Arg Gly Leu Gly Ala Leu			
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<210> 2829

<211> 3648

<212> DNA

<213> Homo sapiens

<400> 2829

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<210> 2830
 <211> 668
 <212> PRT
 <213> Homo sapiens

<400> 2830
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 35 40 45
 Leu Ser Ala Leu Ser Gln Leu Val Pro Cys Val Gly Cys Arg Arg Ser
 50 55 60
 Val Glu Arg Leu Phe Ser Gln Leu Val Glu Ser Gly Asn Pro Ala Leu

65	70	75	80
Glu Pro Leu Thr Val	Gly Pro Lys Gly	Val Leu Ser Val	Thr Arg Ser
85	90	95	
Cys Met Thr Asp Ala	Lys Lys Leu Tyr	Thr Leu Phe Tyr	Val His Gly
100	105	110	
Ser Lys Leu Asn Asp	Met Ile Asp Ala	Ile Pro Lys Ser	Lys Lys Asn
115	120	125	
Lys Arg Cys Gln Leu	His Ser Leu Asp	Thr His Lys Pro	Lys Pro Leu
130	135	140	
Gly Gly Cys Trp Met	Asp Val Trp Glu	Leu Met Ser Gln	Glu Cys Arg
145	150	155	160
Asp Glu Val Val	Leu Ile Asp Ser	Ser Cys Leu	Leu Glu Thr Leu Glu
165	170	175	
Thr Tyr Leu Arg Lys	His Arg Phe Cys	Thr Asp Cys Lys	Asn Lys Val
180	185	190	
Leu Arg Ala Tyr Asn	Ile Leu Ile Gly	Glu Leu Asp	Cys Ser Lys Glu
195	200	205	
Lys Gly Tyr Cys Ala	Ala Leu Tyr Glu	Gly Leu Arg	Cys Cys Pro His
210	215	220	
Glu Arg His Ile His	Val Cys Cys Glu	Thr Asp Phe	Ile Ala His Leu
225	230	235	240
Leu Gly Arg Ala	Glu Pro Glu Phe	Ala Gly	Gly Tyr Glu Arg Arg Glu
245	250	255	
Arg His Ala Lys	Thr Ile Asp Ile	Ala Gln Glu	Glu Val Leu Thr Cys
260	265	270	
Leu Gly Ile His	Leu Tyr Glu Arg	Leu His Arg Ile	Trp Gln Lys Leu
275	280	285	
Arg Ala Glu Glu	Gln Thr Trp Gln	Met Leu Phe	Tyr Leu Gly Val Asp
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Ala Leu Arg Lys	Ser Phe Glu Met	Thr Val Glu	Lys Val Gln Gly Ile
305	310	315	320
Ser Arg Leu Glu	Gln Leu Cys Glu	Glu Phe Ser	Glu Glu Arg Val
325	330	335	
Arg Glu Leu Lys	Gln Glu Lys Lys	Arg Gln Lys Arg	Lys Asn Arg Arg
340	345	350	
Lys Asn Lys Cys	Val Cys Asp Ile	Pro Thr Pro	Leu Gln Thr Ala Asp
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Glu Lys Glu Val	Ser Gln Glu Lys	Glu Thr Asp	Phe Ile Glu Asn Ser
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Ser Cys Lys Ala	Cys Gly Ser Thr	Glu Asp Gly	Asn Thr Cys Val Glu
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Val Ile Val Thr	Asn Glu Asn Thr	Ser Cys Thr	Cys Pro Ser Ser Gly
405	410	415	
Asn Leu Leu Gly	Ser Pro Lys Ile	Lys Gly Leu	Ser Pro His Cys
420	425	430	
Asn Gly Ser Asp	Cys Gly Tyr	Ser Ser Met	Glu Gly Ser Glu Thr
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Gly Ser Arg Glu	Gly Ser Asp Val	Ala Cys Thr	Glu Gly Ile Cys Asn
450	455	460	
His Asp Glu His	Gly Asp Asp	Ser Cys Val	His His Cys Glu Asp Lys
465	470	475	480
Glu Asp Asp Gly	Asp Ser Cys Val	Glu Cys Trp	Ala Asn Ser Glu Glu
485	490	495	
Asn Asp Thr Lys	Gly Lys Asn	Lys Lys Lys	Lys Ser Lys Ile

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515	520	525
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530	535	540
Arg Asp Lys Thr Lys Asp Thr His Pro Glu Ser Cys Cys Ser Ser Glu		
545	550	555
Lys Gly Gly Gln Pro Leu Pro Trp Phe Glu His Arg Lys Asn Val Pro		
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Gln Phe Ala Glu Pro Thr Glu Thr Leu Phe Gly Pro Asp Ser Gly Lys		
580	585	590
Gly Ala Lys Ser Leu Val Glu Leu Leu Asp Glu Ser Glu Cys Thr Ser		
595	600	605
Asp Glu Glu Ile Phe Ile Ser Gln Asp Glu Ile Gln Ser Phe Met Ala		
610	615	620
Asn Asn Gln Ser Phe Tyr Ser Asn Arg Glu Gln Tyr Arg Gln His Leu		
625	630	635
Lys Glu Lys Phe Asn Lys Tyr Cys Arg Leu Asn Asp His Lys Arg Pro		
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<210> 2831
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<212> DNA
<213> Homo sapiens

<400> 2831
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 <211> 611
 <212> PRT
 <213> Homo sapiens

 <400> 2832
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 35 40 45
 Gly Pro Ala Leu Lys Arg Ser Phe Glu Val Glu Glu Val Glu Thr Pro
 50 55 60
 Asn Ser Thr Pro Pro Arg Arg Val Gln Thr Pro Leu Leu Arg Ala Thr
 65 70 75 80
 Val Ala Ser Ser Thr Gln Lys Phe Gln Asp Leu Gly Val Lys Asn Ser
 85 90 95
 Glu Pro Ser Ala Arg His Val Asp Ser Leu Ser Gln Arg Ser Pro Lys
 100 105 110
 Ala Ser Leu Arg Arg Val Glu Leu Ser Gly Pro Lys Ala Ala Glu Pro
 115 120 125
 Val Ser Arg Arg Thr Glu Leu Ser Ile Asp Ile Ser Ser Lys Gln Val
 130 135 140
 Glu Asn Ala Gly Ala Ile Gly Pro Ser Arg Phe Gly Leu Lys Arg Ala
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 Glu Val Leu Gly His Lys Thr Pro Glu Pro Ala Pro Arg Arg Thr Glu
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 Ile Thr Ile Val Lys Pro Gln Glu Ser Ala His Arg Arg Met Glu Pro
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 Pro Ala Ser Lys Val Pro Glu Val Pro Thr Ala Pro Ala Thr Asp Ala
 195 200 205
 Ala Pro Lys Arg Val Glu Ile Gln Met Pro Lys Pro Ala Glu Ala Pro
 210 215 220
 Thr Ala Pro Ser Pro Ala Gln Thr Leu Glu Asn Ser Glu Pro Ala Pro
 225 230 235 240
 Val Ser Gln Leu Gln Ser Arg Leu Glu Pro Lys Pro Gln Pro Pro Val
 245 250 255
 Ala Glu Ala Thr Pro Arg Ser Gln Glu Ala Thr Glu Ala Ala Pro Ser
 260 265 270
 Cys Val Gly Asp Met Ala Asp Thr Pro Arg Asp Ala Gly Leu Lys Gln
 275 280 285
 Ala Pro Ala Ser Arg Asn Glu Lys Ala Pro Val Asp Phe Gly Tyr Val
 290 295 300
 Gly Ile Asp Ser Ile Leu Glu Gln Met Arg Arg Lys Ala Met Lys Gln
 305 310 315 320
 Gly Phe Glu Phe Asn Ile Met Val Val Gly Gln Ser Gly Leu Gly Lys
 325 330 335
 Ser Thr Leu Ile Asn Thr Leu Phe Lys Ser Lys Ile Ser Arg Lys Ser
 340 345 350
 Val Gln Pro Thr Ser Glu Glu Arg Ile Pro Lys Thr Ile Glu Ile Lys
 355 360 365
 Ser Ile Thr His Asp Ile Glu Glu Lys Gly Val Arg Met Lys Leu Thr

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Trp Gln Pro Ile Met Lys Phe Ile Asn Asp Gln Tyr Glu Lys Tyr Leu		400
405	410	415
Gln Glu Glu Val Asn Ile Asn Arg Lys Lys Arg Ile Pro Asp Thr Arg		
420	425	430
Val His Cys Cys Leu Tyr Phe Ile Pro Ala Thr Gly His Ser Leu Arg		
435	440	445
Pro Leu Asp Ile Glu Phe Met Lys Arg Leu Ser Lys Val Val Asn Ile		
450	455	460
Val Pro Val Ile Ala Lys Ala Asp Thr Leu Thr Leu Glu Glu Arg Val		
465	470	475
His Phe Lys Gln Arg Ile Thr Ala Asp Leu Leu Ser Asn Gly Ile Asp		
485	490	495
Val Tyr Pro Gln Lys Glu Phe Asp Glu Asp Ser Glu Asp Arg Leu Val		
500	505	510
Asn Glu Lys Phe Arg Glu Met Ile Pro Phe Ala Val Val Gly Ser Asp		
515	520	525
His Glu Tyr Gln Val Asn Gly Lys Arg Ile Leu Gly Arg Lys Thr Lys		
530	535	540
Trp Gly Thr Ile Glu Val Glu Asn Thr Thr His Cys Glu Phe Ala Tyr		
545	550	555
Leu Arg Asp Leu Leu Ile Arg Thr His Met Gln Asn Ile Lys Asp Ile		
565	570	575
Thr Ser Ser Ile His Phe Glu Ala Tyr Arg Val Lys Arg Leu Asn Glu		
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Gly Ser Ser Ala Met Ala Asn Gly Val Glu Glu Lys Glu Pro Glu Ala		
595	600	605
Pro Glu Met		
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<210> 2833
<211> 420
<212> DNA
<213> Homo sapiens

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180
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360
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420

<210> 2834

<211> 117
<212> PRT
<213> Homo sapiens

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35 40 45
Arg Val Ala Thr Gly Arg Pro Gly Thr Ser Pro Ala Leu Phe Ser
50 55 60
Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr
65 70 75 80
Lys Cys Leu Ala Ala Ala Thr Trp Gly Arg Leu Pro Gly Pro Glu Glu
85 90 95
Thr Leu Pro Gly Gln Asp Ser Trp Asn Gly Val Pro Ser Arg Ala Gly
100 105 110
Leu Gly Met Cys Ala
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<210> 2835
<211> 938
<212> DNA
<213> Homo sapiens

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938

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<210> 2837
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<212> DNA
<213> *Homo sapiens*

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300
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<210> 2838

<211> 370

<212> PRT

<213> Homo sapiens

<400> 2838

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Ser	Glu	Glu	Glu	Ala	Asn	Tyr	Trp	Lys	Asp	Leu	Ala	Met	Thr	Tyr		
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Lys	Gln	Arg	Ala	Glu	Asn	Thr	Gln	Glu	Glu	Leu	Arg	Glu	Phe	Gln	Glu	
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Gly	Ser	Arg	Glu	Tyr	Glu	Ala	Glu	Leu	Glu	Thr	Gln	Ley	Gln	Ile		
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Glu	Thr	Arg	Asn	Arg	Asp	Leu	Leu	Ser	Glu	Asn	Asn	Arg	Leu	Arg	Met	
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Glu	Leu	Glu	Thr	Ile	Lys	Glu	Lys	Phe	Glu	Val	Gln	His	Ser	Glu	Gly	
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Tyr	Arg	Gln	Ile	Ser	Ala	Leu	Glu	Asp	Asp	Leu	Ala	Gln	Thr	Lys	Ala	

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Asp Ala Leu Glu Arg Ala Lys Arg Ala Thr Ile Met Ser Leu Glu Asp		
145	150	155
Phe Glu Gln Arg Leu Asn Gln Ala Ile Glu Arg Asn Ala Phe Leu Glu		
165	170	175
Ser Glu Leu Asp Glu Lys Glu Asn Leu Leu Glu Ser Val Gln Arg Leu		
180	185	190
Lys Asp Glu Ala Arg Asp Leu Arg Gln Glu Leu Ala Val Gln Gln Lys		
195	200	205
Gln Glu Lys Pro Arg Thr Pro Met Pro Ser Ser Val Glu Ala Glu Arg		
210	215	220
Thr Asp Thr Ala Val Gln Ala Thr Gly Ser Val Pro Ser Thr Pro Ile		
225	230	235
Ala His Arg Gly Pro Ser Ser Ser Leu Asn Thr Pro Gly Ser Phe Arg		
245	250	255
Arg Gly Leu Asp Asp Xaa His Arg Gly Thr Pro Leu Thr Pro Ala Ala		
260	265	270
Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu Leu Arg Lys Val Gly		
275	280	285
Ala Leu Glu Ser Lys Leu Ala Ser Cys Arg Asn Leu Val Tyr Asp Gln		
290	295	300
Ser Pro Asn Arg Thr Gly Gly Pro Ala Ser Gly Arg Ser Ser Lys Asn		
305	310	315
Arg Asp Gly Gly Glu Arg Arg Pro Ser Ser Thr Ser Val Pro Leu Gly		
325	330	335
Asp Lys Gly Ser Val Pro Ser Asn Lys Pro Leu Ala Gly Gly Glu Asn		
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Pro Pro Ala Pro Gly Lys Arg His Ser Pro Pro Ala His Ser His Val		
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Ser Phe		
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<210> 2839

<211> 606

<212> DNA

<213> Homo sapiens

<400> 2839

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420

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<210> 2840
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 <212> PRT
 <213> Homo sapiens

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 Ala Thr Asn Gly Asp Pro Arg Asn Ser Cys Ser Leu His Tyr Ile His
 35 40 45
 Pro Tyr Gln Pro Asn Glu Tyr Leu Lys Ala Leu Val Ala Val Gly Glu
 50 55 60
 Ile Cys Gln Asp Tyr Asp Ser Asp Lys Met Phe Pro Ala Phe Gly Phe
 65 70 75 80
 Gly Ala Arg Ile Pro Pro Glu Tyr Thr Val Ser His Asp Phe Ala Ile
 85 90 95
 Asn Phe Asn Glu Asp Asn Pro Glu Cys Ala Gly Ile Gln Gly Val Val
 100 105 110
 Glu Ala Tyr Gln Ser Cys Leu Pro Lys Leu Gln Leu Tyr Gly Pro Thr
 115 120 125
 Asn Ile Ala Pro Ile Ile Gln Lys Val Ala Lys Ser Ala Ser Glu Glu
 130 135 140
 Thr Asn Thr Lys Glu Ala Ser Gln Tyr Phe Ile Leu Leu Ile Leu Thr
 145 150 155 160
 Asp Gly Val Ile Thr Asp Met Gly Asp Thr Arg Glu Ala Ile Val His
 165 170 175
 Ala Ser His Leu Pro Met Ser Val Ile Ile Val Gly Val Gly Asn Ala
 180 185 190
 Asp Phe Ser Asp Met Gln Met Leu Asp Gly
 195 200

<210> 2841
 <211> 2065
 <212> DNA
 <213> Homo sapiens

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 1920
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 2040
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 2065

<210> 2842
 <211> 540
 <212> PRT
 <213> Homo sapiens

<400> 2842
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 35 40 45
 Cys Lys Ser Glu Pro Pro Leu Leu Arg Thr Ser Lys Arg Thr Ile Tyr
 50 55 60
 Thr Ala Gly Arg Pro Pro Trp Tyr Asn Glu His Gly Thr Gln Ser Lys
 65 70 75 80
 Glu Ala Phe Ala Ile Gly Leu Gly Gly Ser Ala Ser Gly Lys Thr
 85 90 95
 Thr Val Ala Arg Met Ile Ile Glu Ala Leu Asp Val Pro Trp Val Val
 100 105 110
 Leu Leu Ser Met Asp Ser Phe Tyr Lys Val Leu His Ser Leu Pro His
 115 120 125
 Gln Val Leu Thr Glu Gln Gln Glu Gln Ala Ala His Asn Asn Phe
 130 135 140
 Asn Phe Asp His Pro Asp Ala Phe Asp Phe Asp Leu Ile Ile Ser Thr
 145 150 155 160
 Leu Lys Lys Leu Lys Gln Gly Lys Ser Val Lys Val Pro Ile Tyr Asp
 165 170 175
 Phe Thr Thr His Ser Arg Lys Lys Asp Trp Lys Thr Leu Tyr Gly Ala
 180 185 190
 Asn Val Ile Ile Phe Glu Gly Ile Met Ala Phe Ala Asp Lys Thr Leu
 195 200 205
 Leu Glu Leu Leu Asp Met Lys Ile Phe Val Asp Thr Asp Ser Asp Ile
 210 215 220
 Arg Leu Val Arg Arg Leu Arg Arg Asp Ile Ser Glu Arg Gly Arg Asp
 225 230 235 240
 Ile Glu Gly Val Ile Lys Gln Tyr Asn Lys Phe Val Lys Pro Ser Phe
 245 250 255
 Asp Gln Tyr Ile Gln Pro Thr Met Arg Leu Ala Asp Ile Val Val Pro
 260 265 270
 Arg Gly Ser Gly Asn Thr Val Ala Ile Asp Leu Ile Val Gln His Val
 275 280 285
 His Ser Gln Leu Glu Glu Arg Glu Leu Ser Val Arg Ala Ala Leu Ala

290	295	300
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Ser Thr Pro Gln Val Arg Gly Met His Thr Ile	Ile Arg Asp	Lys Glu
325	330	335
Thr Ser Arg Asp Glu Phe Ile Phe Tyr Ser Lys	Arg Leu Met	Arg Leu
340	345	350
Leu Ile Glu His Ala Leu Ser Phe Leu Pro Phe	Gln Asp Cys Val	Val Val
355	360	365
Gln Thr Pro Gln Gly Gln Asp Tyr Ala Gly Lys	Cys Tyr Ala Gly Lys	
370	375	380
Gln Ile Thr Gly Val Ser Ile Leu Arg Ala Gly	Glu Thr Met	Glu Pro
385	390	395
Ala Leu Arg Ala Val Cys Lys Asp Val Arg Ile	Gly Thr Ile	Leu Ile
405	410	415
Gln Thr Asn Gln Leu Thr Gly Glu Pro Glu Leu	His Tyr Leu Arg	Leu
420	425	430
Pro Lys Asp Ile Ser Asp Asp His Val Ile Leu	Met Asp Cys Thr	Val
435	440	445
Ser Thr Gly Ala Ala Ala Met Met Ala Val Arg	Val Leu Leu Asp	His
450	455	460
Asp Val Pro Glu Asp Lys Ile Phe Leu Leu Ser	Leu Leu Met	Ala Glu
465	470	475
Met Gly Val His Ser Val Ala Tyr Ala Phe Pro	Arg Val Arg Ile	Ile
485	490	495
Thr Thr Ala Val Asp Lys Arg Val Asn Asp Leu	Phe Arg Ile Ile	Pro
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<210> 2843

<211> 497

<212> DNA

<213> Homo sapiens

<400> 2843

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<210> 2844

<211> 165

<212> PRT

<213> Homo sapiens

<400> 2844

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					20				25						30
Ser	Gln	Asn	Thr	Glu	Leu	Lys	Thr	Gln	Ser	Pro	Glu	Phe	Glu	Ala	Gln
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Ser	Ser	Lys	Phe	Gln	Glu	Gly	Ala	Glu	Met	Leu	Leu	Asn	Pro	Glu	Glu
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Lys	Ser	Pro	Leu	Asn	Ile	Ser	Val	Gly	Val	His	Pro	Leu	Asp	Ser	Phe
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Thr	Gln	Gly	Phe	Gly	Glu	Gln	Pro	Thr	Gly	Asp	Leu	Pro	Ile	Gly	Pro
					85				90						95
Pro	Phe	Glu	Met	Pro	Thr	Gly	Ala	Leu	Leu	Ser	Thr	Pro	Gln	Phe	Glu
					100				105						110
Met	Leu	Gln	Asn	Pro	Leu	Gly	Leu	Thr	Gly	Ala	Leu	Arg	Gly	Pro	Gly
					115				120						125
Arg	Arg	Gly	Gly	Arg	Ala	Arg	Gly	Gly	Gln	Gly	Pro	Arg	Pro	Asn	Ile
					130				135						140
Cys	Gly	Ile	Trp	Gly	Lys	Ser	Phe	Gly	Arg	Asp	Tyr	Pro	Asp	Pro	Ala
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Gln	Ala	Ser	Thr	Pro											
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<210> 2845

<211> 934

<212> DNA

<213> Homo sapiens

<400> 2845

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300					
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360					
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420					
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480					

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<210> 2846
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 2846
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 35 40 45
 Pro His Arg Pro Ser Pro Pro Glu Pro Ala Phe Leu Pro Gln His Leu
 50 55 60
 Pro Ser Leu Ala Thr Gly Tyr Ile Cys Val Asp Cys Leu Ser Leu His
 65 70 75 80
 Gly Asn Val Arg Thr Ile Phe Val Cys Cys Gly Thr Ala Ala Leu Arg
 85 90 95
 Ala Ala Ser Ser Thr Gln Val Ala Leu Asp Thr Asp Cys Thr Gln Gly
 100 105 110
 Glu Leu Gly Leu Ile Thr Pro Leu Thr Arg Gly Glu Thr Leu Gln Leu
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 Glu Val Thr Phe Ile Pro Leu Gln Leu Arg Pro Phe His Ser Pro Arg
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 Thr His Arg Gly Ala
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<210> 2847
 <211> 2830
 <212> DNA
 <213> Homo sapiens

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840
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 <211> 856
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Gly Pro Pro Ser Leu Asp Ala Gln Pro Asn Ser Lys Thr Glu Arg
 50 55 60
 Ser Lys Ser Tyr Asp Glu Gly Leu Asp Asp Tyr Arg Glu Asp Ala Lys

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Ser Gln Lys Ser Ser Glu Asp Ser Gly Ser Arg Lys Asp Ser Ser Ser			
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Glu Val Phe Ser Asp Ala Ala Lys Glu Gly Trp Leu His Phe Arg Pro			
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Leu Val Thr Asp Lys Gly Lys Arg Val Gly Gly Ser Ile Arg Pro Trp			
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Lys Gln Met Tyr Val Val Leu Arg Gly His Ser Leu Tyr Leu Tyr Lys			
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Asp Lys Arg Glu Gln Thr Thr Pro Ser Glu Glu Glu Gln Pro Ile Ser			
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Val Asn Ala Cys Leu Ile Asp Ile Ser Tyr Ser Glu Thr Lys Arg Lys			
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Phe Glu Lys Lys Pro Thr Ala Thr Gly Thr Phe Gly Val Arg Leu Asp			
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Ile Cys Cys Lys Leu Val Glu Glu Arg Gly Leu Glu Tyr Thr Gly Ile			
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Tyr Arg Val Pro Gly Asn Asn Ala Ala Ile Ser Ser Met Gln Glu Glu			
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Pro Glu Pro Leu Phe Thr Asn Asp Lys Tyr Ala Asp Phe Ile Glu Ala			
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Thr Lys Ser Lys Gly Ser Trp Gly Ser Gly Lys Asp Gln Tyr Ser Arg		
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Lys Pro Lys Glu Lys Ala Gln Pro Ser Ser Ser Glu Asp Glu Leu Asp		
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Lys Glu Glu Ser Lys Lys Glu Ser Glu Thr Leu Gly Arg Lys Gln Lys		
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Ile Ile Ile Ala Lys Glu Asn Ser Thr Arg Lys Asp Pro Ser Thr Thr		
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Lys Asp Glu Lys Ile Ser Leu Gly Lys Glu Ser Thr Pro Ser Glu Glu		
675	680	685
Pro Ser Pro Pro His Asn Ser Lys His Asn Lys Ser Pro Thr Leu Ser		
690	695	700
Cys Arg Phe Ala Ile Leu Lys Glu Ser Pro Arg Ser Leu Leu Ala Gln		
705	710	715
Lys Ser Ser His Leu Glu Glu Thr Gly Ser Asp Ser Gly Thr Leu Leu		
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Ser Thr Ser Ser Gln Ala Ser Leu Ala Arg Phe Ser Met Lys Lys Ser		
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Lys Gly Asp Glu Ala Asp Asp Glu Arg Ser Glu Leu Ile Ser Glu Gly		
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Arg Pro Val Glu Thr Asp Ser Gly Asn Glu Phe Pro Ile Phe Pro Thr		
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<211> 380

<212> DNA

<213> Homo sapiens

<400> 2849

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<210> 2850

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2850

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Glu	Glu	Asp	Lys	Lys	Asp	Gly	Lys	Glu	Pro	Ser	Asp	Lys	Pro	Gln	Lys
							35		40			45			
Ala	Val	Gln	Asp	His	Lys	Glu	Pro	Ser	Asp	Lys	Pro	Gln	Lys	Ala	Val
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<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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 Thr Val Lys Arg Asn Phe Asp Lys Cys Ile Ser Asn Gln Ile Arg Gln
 65 70 75 80
 Met Glu Glu Val Lys Ile Ser Lys Lys Ser Lys Val Gly Ile Leu Pro
 85 90 95
 Phe Val Ala Glu Phe Glu Glu Phe Ala Gly Leu Ala Glu Ser Ile Phe
 100 105 110
 Lys Asn Ala Glu Arg Arg Gly Asp Leu Asp Lys Ala Tyr Thr Lys Leu
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 Ile Arg Gly Val Phe Val Asn Val Glu Lys Val Ala Asn Glu Ser Gln
 130 135 140
 Lys Thr Pro Arg Asp Val Val Met Met Glu Asn Phe His His Ile Phe
 145 150 155 160
 Ala Thr Leu Ser Arg Leu Lys Ile Ser Cys Leu Glu Ala Glu Lys Lys
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 Glu Ala Lys Gln Lys Tyr Thr Asp His Leu Gln Ser Tyr Val Ile Tyr
 180 185 190
 Ser Leu Gly Gln Pro Leu Glu Lys Leu Asn His Phe Phe Glu Gly Val
 195 200 205
 Glu Ala Arg Val Ala Gln Gly Ile Arg Glu Glu Glu Val Ser Tyr Gln
 210 215 220
 Leu Ala Phe Asn Lys Gln Glu Leu Arg Lys Val Ile Lys Glu Tyr Pro
 225 230 235 240
 Gly Lys Glu Val Lys Lys Gly Leu Asp Asn Leu Tyr Lys Lys Val Asp
 245 250 255
 Lys His Leu Cys Glu Glu Glu Asn Leu Leu Gln Val Val Trp His Ser
 260 265 270
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4500
cttccagccc aaatcttagag cattgagcac tttatctccc acgactcagt gaagtttctc
4560

cagtcctctttt tcacccacctt tcctcagttt gctcaattac cccaggccca
 4620
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 4680
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 4740
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 4800
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 4980
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 4993

<210> 2854
<211> 1235
<212> PRT
<213> Homo sapiens

<400> 2854

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Glu	Leu	Phe	Phe	Lys	Asp	Asp	Pro	Glu	Lys	Leu	Phe	Ser	Asp	Leu	Arg
										25					30
Glu	Ile	Gly	His	Gly	Ser	Phe	Gly	Ala	Val	Tyr	Phe	Ala	Arg	Asp	Val
										40					45
Arg	Asn	Ser	Glu	Val	Val	Ala	Ile	Lys	Lys	Met	Ser	Tyr	Ser	Gly	Lys
										55					60
Gln	Ser	Asn	Glu	Lys	Trp	Gln	Asp	Ile	Ile	Lys	Glu	Val	Arg	Phe	Leu
										70					80
Gln	Lys	Leu	Arg	His	Pro	Asn	Thr	Ile	Gln	Tyr	Arg	Gly	Cys	Tyr	Leu
										85					95
Arg	Glu	His	Thr	Ala	Trp	Leu	Val	Met	Glu	Tyr	Cys	Leu	Gly	Ser	Ala
									100						110
Ser	Asp	Leu	Leu	Glu	Val	His	Lys	Lys	Pro	Leu	Gln	Glu	Val	Glu	Ile
										115					125
Ala	Ala	Val	Thr	His	Gly	Ala	Leu	Gln	Gly	Leu	Ala	Tyr	Leu	His	Ser
										130					140
His	Asn	Met	Ile	His	Arg	Asp	Val	Lys	Ala	Gly	Asn	Ile	Leu	Leu	Ser
									145						160
Glu	Pro	Gly	Leu	Val	Lys	Leu	Gly	Asp	Phe	Gly	Ser	Ala	Ser	Ile	Met
									165						175
Ala	Pro	Ala	Asn	Ser	Phe	Val	Gly	Thr	Pro	Tyr	Trp	Met	Ala	Pro	Glu
									180						190
Val	Ile	Leu	Ala	Met	Asp	Glu	Gly	Gln	Tyr	Asp	Gly	Lys	Val	Asp	Val
									195						205
Trp	Ser	Leu	Gly	Ile	Thr	Cys	Ile	Glu	Leu	Ala	Glu	Arg	Lys	Pro	Pro
									210						220
Leu	Phe	Asn	Met	Asn	Ala	Met	Ser	Ala	Leu	Tyr	His	Ile	Ala	Gln	Asn
									225						240
Glu	Ser	Pro	Val	Leu	Gln	Ser	Gly	His	Trp	Ser	Glu	Tyr	Phe	Arg	Asn

245	250	255
Phe Val Asp Ser Cys Leu Gln Lys Ile Pro Gln Asp Arg Pro Thr Ser		
260	265	270
Glu Val Leu Leu Lys His Arg Phe Val Leu Arg Glu Arg Pro Pro Thr		
275	280	285
Val Ile Met Asp Leu Ile Gln Arg Thr Lys Asp Ala Val Arg Glu Leu		
290	295	300
Asp Asn Leu Gln Tyr Arg Lys Met Lys Lys Ile Leu Phe Gln Glu Ala		
305	310	320
Pro Asn Gly Pro Gly Ala Glu Ala Pro Glu Glu Glu Glu Ala Glu		
325	330	335
Pro Tyr Met His Arg Ala Gly Thr Leu Thr Ser Leu Glu Ser Ser His		
340	345	350
Ser Val Pro Ser Met Ser Ile Ser Ala Ser Ser Gln Ser Ser Ser Val		
355	360	365
Asn Ser Leu Ala Asp Ala Ser Asp Asn Glu Glu Glu Glu Glu Glu		
370	375	380
Glu Glu Glu Glu Glu Glu Gly Pro Glu Ala Arg Glu Met Ala		
385	390	400
Met Met Gln Glu Gly Glu His Thr Val Thr Ser His Ser Ser Ile Ile		
405	410	415
His Arg Leu Pro Gly Ser Asp Asn Leu Tyr Asp Asp Pro Tyr Gln Pro		
420	425	430
Glu Ile Thr Pro Ser Pro Leu Gln Pro Pro Ala Ala Pro Ala Pro Thr		
435	440	445
Ser Thr Thr Ser Ser Ala Arg Arg Arg Ala Tyr Cys Arg Asn Arg Asp		
450	455	460
His Phe Ala Thr Ile Arg Thr Ala Ser Leu Val Ser Arg Gln Ile Gln		
465	470	480
Glu His Glu Gln Asp Ser Ala Leu Arg Glu Gln Leu Ser Gly Tyr Lys		
485	490	495
Arg Met Arg Arg Gln His Gln Lys Gln Leu Leu Ala Leu Glu Ser Arg		
500	505	510
Leu Arg Gly Glu Arg Glu Glu His Ser Ala Arg Leu Gln Arg Glu Leu		
515	520	525
Glu Ala Gln Arg Ala Gly Phe Gly Ala Glu Ala Glu Lys Leu Ala Arg		
530	535	540
Arg His Gln Ala Ile Gly Glu Lys Glu Ala Arg Ala Ala Gln Ala Glu		
545	550	560
Glu Arg Lys Phe Gln Gln His Ile Leu Gly Gln Gln Lys Lys Glu Leu		
565	570	575
Ala Ala Leu Leu Glu Ala Gln Lys Arg Thr Tyr Lys Leu Arg Lys Glu		
580	585	590
Gln Leu Lys Glu Glu Leu Gln Glu Asn Pro Ser Thr Pro Lys Arg Glu		
595	600	605
Lys Ala Glu Trp Leu Leu Arg Gln Lys Glu Gln Leu Gln Gln Cys Gln		
610	615	620
Ala Glu Glu Glu Ala Gly Leu Leu Arg Arg Gln Arg Gln Tyr Phe Glu		
625	630	640
Leu Gln Cys Arg Gln Tyr Lys Arg Lys Met Leu Leu Ala Arg His Ser		
645	650	655
Leu Asp Gln Asp Leu Leu Arg Glu Asp Leu Asn Lys Lys Gln Thr Gln		
660	665	670
Lys Asp Leu Glu Cys Ala Leu Leu Arg Gln His Glu Ala Thr Arg		

675	680	685
Glu Leu Glu Leu Arg Gln Leu Gln Ala Val Gln Arg	Thr Arg Ala Glu	
690	695	700
Leu Thr Arg Leu Gln His Gln Thr Glu Leu Gly Asn Gln Leu Glu Tyr		
705	710	720
Asn Lys Arg Arg Glu Gln Glu Leu Arg Gln Lys His Ala Ala Gln Val		
725	730	735
Arg Gln Gln Pro Lys Ser Leu Lys Val Arg Ala Gly Gln Arg Pro Pro		
740	745	750
Gly Leu Pro Leu Pro Ile Pro Gly Ala Leu Gly Pro Pro Asn Thr Gly		
755	760	765
Thr Pro Ile Glu Gln Gln Pro Cys Ser Pro Gly Gln Glu Ala Val Leu		
770	775	780
Asp Gln Arg Met Leu Gly Glu Glu Glu Ala Val Gly Glu Arg Arg		
785	790	800
Ile Leu Gly Lys Glu Gly Ala Thr Leu Glu Pro Lys Gln Gln Arg Ile		
805	810	815
Leu Gly Glu Glu Ser Gly Ala Pro Ser Pro Ser Pro Gln Lys His Gly		
820	825	830
Ser Leu Val Asp Glu Glu Val Trp Gly Leu Pro Glu Glu Ile Glu Glu		
835	840	845
Leu Arg Val Pro Ser Leu Val Pro Gln Glu Arg Ser Ile Val Gly Gln		
850	855	860
Glu Glu Ala Gly Thr Trp Ser Leu Trp Gly Lys Glu Asp Glu Ser Leu		
865	870	880
Leu Asp Glu Glu Phe Glu Leu Gly Trp Val Gln Gly Pro Ala Leu Thr		
885	890	895
Pro Val Pro Glu Glu Glu Glu Glu Glu Gly Ala Pro Ile Gly		
900	905	910
Thr Pro Arg Asp Pro Gly Asp Gly Cys Pro Ser Pro Asp Ile Pro Pro		
915	920	925
Glu Pro Pro Pro Thr His Leu Arg Pro Cys Pro Ala Ser Gln Leu Pro		
930	935	940
Gly Leu Leu Ser His Gly Leu Leu Ala Gly Leu Ser Phe Ala Val Gly		
945	950	960
Ser Ser Ser Gly Leu Leu Pro Leu Leu Leu Leu Leu Leu Pro Leu		
965	970	975
Leu Ala Ala Gln Gly Gly Gly Leu Gln Ala Ala Leu Leu Ala Leu		
980	985	990
Glu Val Gly Leu Val Gly Leu Gly Ala Ser Tyr Leu Leu Leu Cys Thr		
995	1000	1005
Ala Leu His Leu Pro Ser Ser Leu Phe Leu Leu Leu Ala Gln Gly Thr		
1010	1015	1020
Ala Leu Gly Ala Val Leu Gly Leu Ser Trp Arg Arg Gly Leu Met Gly		
1025	1030	1040
Val Pro Leu Gly Leu Gly Ala Ala Trp Leu Leu Ala Trp Pro Gly Leu		
1045	1050	1055
Ala Leu Pro Leu Val Ala Met Ala Ala Gly Gly Arg Trp Val Arg Gln		
1060	1065	1070
Gln Gly Pro Arg Val Arg Arg Gly Ile Ser Arg Leu Trp Leu Arg Val		
1075	1080	1085
Leu Leu Arg Leu Ser Pro Met Ala Phe Arg Ala Leu Gln Gly Cys Gly		
1090	1095	1100
Ala Val Gly Asp Arg Gly Leu Phe Ala Leu Tyr Pro Lys Thr Asn Lys		

1105	1110	1115	1120
Asp Gly Phe Arg Ser Arg Leu Pro Val Pro Gly Pro Arg Arg Arg Asn			
1125		1130	1135
Pro Arg Thr Thr Gln His Pro Leu Ala Leu Leu Ala Arg Val Trp Val			
1140	1145		1150
Leu Cys Lys Gly Trp Asn Trp Arg Leu Ala Arg Ala Ser Gln Gly Leu			
1155	1160	1165	
Ala Ser His Leu Pro Pro Trp Ala Ile His Thr Leu Ala Ser Trp Gly			
1170	1175	1180	
Leu Leu Arg Gly Glu Arg Pro Thr Arg Ile Pro Arg Leu Leu Pro Arg			
1185	1190	1195	1200
Ser Gln Arg Gln Leu Gly Pro Pro Ala Ser His Gln Pro Leu Pro Gly			
1205	1210	1215	
Thr Leu Ala Gly Arg Arg Ser Arg Thr Arg Gln Ser Arg Ala Leu Pro			
1220	1225	1230	
Pro Trp Arg			
1235			

<210> 2855
<211> 1676
<212> DNA
<213> Homo sapiens

<400> 2855
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agtggcagcc ccgagggagc tagaatgacc acagttcaga ccatcacagg cagtgtatccc
120
gaggaagcca tcttgacac cctttgcacc gatgacagct ctgaagaggc aaagacactc
180
acaatggaca tattgacatt ggctcadacc tccacagaag ctaagggct gtcctcagag
240
agcagcgcct cttccgacgg cccccatcca gtcatcaccc cgtaacgggc ctcagagagc
300
agcgccttccg ccgacggccc ccatccatc atcacccgt cacgggcctc agagagcagc
360
gcctcttccg acggccccc tccagtcatc accccgtcat ggtccccggg atctgatgtc
420
actctctcg ctgaagccct ggtgactgtc acaaacatcg aggttattaa ttgcagcatc
480
acagaaaatag aaacaacgac ttccagcatc cctggggct cagacacaga tctcatcccc
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600
aagcaaaacc acacatcatc gaggtcanca gcctctgccc agaccctgtc cacagccggc
660
accacagagt cagctgcacc tgatgccacg gttgggaccc cactccccac taacagcacc
720
atagaaaagag aagtgacagc acccaggccc acgaccctca gtggagctct ggtcacagtt
780
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840
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900

tttgctggga gctctgcttc ctcc tacagc ccctcgaa ag cgc cctcaa gaactt cacc
 960
 ccttc agaga caccg accat ggacatcgca accaaggggc cttccccac cagcaggac
 1020
 cctttc ctt ctgtccctcc gactacaacc aacagc agcc gagggac gaa cagcac ctt
 1080
 gcca agatca caac ctc agc gaag accac g atga agcccc caac agcc ac gccc ac gact
 1140
 gctcgacga gccc gaccac agac gta gatc gca gatc gtttc ctcc tcctc
 1200
 ggctgagtgt ggcttccccg gaagac ctc a ctg ac ccc ag atg ggca gaa agg ctg atgc
 1260
 agc agc tcca ccc gga actc c ac gccc ac g cgc ctca ctt cc aggt ctcc tt actc
 1320
 tcaggaggagg ctaacggaca tcagctgcag ccaggcatgt cccgtatgcc aaa agagggt
 1380
 gctccccta gcctgggccc ccaccgac ag actgc agctg cg tta ctg tg ctg agaggt
 1440
 cccaga aggt tcccatgaag ggc agcatgt cca agccct gaccc agat gtggca ac ag
 1500
 gaccctcgct cacatccacc ggagtgtatg tgtgggagg ggctt cactt gttccca g
 1560
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 1620
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 1676

<210> 2856

<211> 401

<212> PRT

<213> Homo sapiens

<400> 2856
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 Gln Thr Ile Thr Gly Ser Asp Pro Glu Glu Ala Ile Phe Asp Thr Leu
 35 40 45
 Cys Thr Asp Asp Ser Ser Glu Glu Ala Lys Thr Leu Thr Met Asp Ile
 50 55 60
 Leu Thr Leu Ala His Thr Ser Thr Glu Ala Lys Gly Leu Ser Ser Glu
 65 70 75 80
 Ser Ser Ala Ser Ser Asp Gly Pro His Pro Val Ile Thr Pro Ser Arg
 85 90 95
 Ala Ser Glu Ser Ser Ala Ser Ser Asp Gly Pro His Pro Val Ile Thr
 100 105 110
 Pro Ser Arg Ala Ser Glu Ser Ser Ala Ser Ser Asp Gly Pro His Pro
 115 120 125
 Val Ile Thr Pro Ser Trp Ser Pro Gly Ser Asp Val Thr Leu Leu Ala
 130 135 140
 Glu Ala Leu Val Val Thr Val Thr Asn Ile Glu Val Ile Asn Cys Ser Ile
 145 150 155 160
 Thr Glu Ile Glu Thr Thr Ser Ser Ile Pro Gly Ala Ser Asp Thr

165	170	175
Asp Leu Ile Pro Thr Glu Gly Val Lys Ala Ser Ser Thr Ser Asp Pro		
180	185	190
Pro Ala Leu Pro Asp Ser Xaa Leu Lys Gln Asn His Thr Ser Leu Arg		
195	200	205
Ser Xaa Ala Ser Ala Glu Thr Leu Ser Thr Ala Gly Thr Thr Glu Ser		
210	215	220
Ala Ala Pro Asp Ala Thr Val Gly Thr Pro Leu Pro Thr Asn Ser Thr		
225	230	235
Ile Glu Arg Glu Val Thr Ala Pro Arg Ala Thr Thr Leu Ser Gly Ala		
245	250	255
Leu Val Thr Val Ser Arg Asn Pro Leu Glu Glu Thr Ser Ala Leu Ser		
260	265	270
Val Glu Thr Pro Ser Tyr Val Lys Val Ser Gly Ala Ala Pro Val Ser		
275	280	285
Ile Glu Ala Gly Ser Ala Val Gly Lys Thr Thr Ser Phe Ala Gly Ser		
290	295	300
Ser Ala Ser Ser Tyr Ser Pro Ser Glu Ala Ala Leu Lys Asn Phe Thr		
305	310	315
Pro Ser Glu Thr Pro Thr Met Asp Ile Ala Thr Lys Gly Pro Phe Pro		
325	330	335
Thr Ser Arg Asp Pro Leu Pro Ser Val Pro Pro Thr Thr Asn Ser		
340	345	350
Ser Arg Gly Thr Asn Ser Thr Leu Ala Lys Ile Thr Thr Ser Ala Lys		
355	360	365
Thr Thr Met Lys Pro Pro Thr Ala Thr Pro Thr Thr Ala Arg Thr Arg		
370	375	380
Pro Thr Thr Asp Val Ser Ala Gly Glu Asn Gly Ser Ser Ser Cys		
385	390	395
Gly		400

<210> 2857
<211> 1668
<212> DNA
<213> Homo sapiens

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120
aggctagcca gagggtaatt acacaggtgt aggccggcgg ggcgggcggga gggctcgaaa
180
ggcgcagggg actggaagag ttggctgcgc ccaggcacca ggtggaagaa tttccataacc
240
agccctgcgg aggtgcctct gttccagag gcgttttgt acgaaggcgt ttttggaaagc
300
gaagcagaag ccgtagaatc agcggcgagc ctgttgaaag aacccacagg tgcatttcac
360
agcactctgg gcgaaaattg gatgtgaaaa tgaagccaga ccgagatact ctggatgaat
420
attttgaata tgatgcagag gagttcttgg tctctttggc cttgctgata acagaaggac
480

gaacacctga atgttctgta aaaggcgaa cagaaagctt tcattgcctt ccagcacagt
 540
 cttgttaccc agtaactacc aaacatgaat gtagtgacaa gctggccag tgccgccaag
 600
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 660
 aaatgatgct actaccagac tgctgctaca gcgtatgg gcccaccaca gagggattg
 720
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 780
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 840
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 900
 cacgaaatat tctctacaga atcagtgctg ctgatgtaga cctacagtgg aattttcac
 960
 agactccaat tgagcatgtg tttcctgttc ccaatgttcc tcacaatgtt gccttgaaag
 1020
 tcagtggtca atccctggcc caaacaatct aattatccag ttttgacgtg cagtattcac
 1080
 actaatattg gcotttatga gaaaagaatt caacaacata aactaaaaac tcatcagcac
 1140
 cataacccaa atgaagcaga acaatgtggt acaaacagtt cacagcgctt gtgttagcaaa
 1200
 caaacttggc ccatggcacc tgaaagtgtg ttacatgcaa aaagtggccc aagtccagaa
 1260
 tatactgcag ctgtcaaaaa tatcaaacta tatccaggca ctggcagtaa atctgaccat
 1320
 gggacatctc aagccaatat tctaggctt agtggtagt gtgatataaa atcacaagaa
 1380
 acatcagtga gaactttaaa atcatttca atggttattt ccagtatctc taaccgccag
 1440
 agtttctggc agtcagctgg tgagactaac ccttaatag gcttttaat tcaggagcgg
 1500
 caagaaatca ttgcaagaat tgctcaacat ttgattcatt gtgatccaag cacttcacat
 1560
 gtttctggac gtccatttaa tactcaagag tctagttcac tccattcaaa actttccgg
 1620
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 1668

<210> 2858

<211> 220

<212> PRT

<213> Homo sapiens

<400> 2858

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Glu	Glu	Phe	Leu	Val	Ser	Leu	Ala	Leu	Leu	Ile	Thr	Glu	Gly	Arg	Thr
									20					30	
Pro	Glu	Cys	Ser	Val	Lys	Gly	Arg	Thr	Glu	Ser	Phe	His	Cys	Pro	Pro
									35					45	
Ala	Gln	Ser	Cys	Tyr	Pro	Val	Thr	Thr	Lys	His	Glu	Cys	Ser	Asp	Lys

50	55	60
Leu Ala Gln Cys Arg Gln Ala Arg Arg Thr Arg Ser Glu Val Thr Leu		
65	70	75
Leu Trp Lys Asn Asn Leu Pro Ile Met Val Glu Met Met Leu Leu Pro		80
85	90	95
Asp Cys Cys Tyr Ser Asp Asp Gly Pro Thr Thr Glu Gly Ile Asp Leu		
100	105	110
Asn Asp Pro Ala Ile Lys Gln Asp Ala Leu Leu Leu Glu Arg Trp Ile		
115	120	125
Leu Glu Pro Val Pro Arg Gln Asn Gly Asp Arg Phe Ile Glu Glu Lys		
130	135	140
Thr Leu Leu Ala Val Arg Ser Phe Val Phe Ser Gln Leu Ser		
145	150	155
Ala Trp Leu Ser Val Ser His Gly Ala Ile Pro Arg Asn Ile Leu Tyr		160
165	170	175
Arg Ile Ser Ala Ala Asp Val Asp Leu Gln Trp Asn Phe Ser Gln Thr		
180	185	190
Pro Ile Glu His Val Phe Pro Val Pro Asn Val Ser His Asn Val Ala		
195	200	205
Leu Lys Val Ser Gly Gln Ser Leu Ala Gln Thr Ile		
210	215	220

<210> 2859

<211> 1029

<212> DNA

<213> Homo sapiens

<400> 2859

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 120
 cacccggcaa tggccctcg aaggggcagc ggttagtggca gcgccctctgc tctcaatgca
 180
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 240
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 300
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 360
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 420
 420
 agtatcagct ctaacaacag tatagcagag gacactgaga gctatgatga tctggatgaa
 480
 480
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 540
 540
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 600
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 660
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 720
 720
 catcagattc atcatgggca ccaccccaa catggtcacc accatccatc tcatgttgct
 780

gtggccagtgcatccattac tggtgccca ccctcaagcc cagtatcttag aaaactctct
 840
 acaactggaa gctctgacag tatcacacca gttgcaccaa cttctgctgt atcatccagt
 900
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 960
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 1020
 tttaattcc
 1029

<210> 2860
 <211> 343
 <212> PRT
 <213> Homo sapiens

<400> 2860
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 20 25 30
 Asp Ile Ser Ala Arg Lys Met Ala His Pro Ala Met Phe Pro Arg Arg
 35 40 45
 Gly Ser Gly Ser Gly Ser Ala Ser Ala Leu Asn Ala Ala Gly Thr Gly
 50 55 60
 Val Gly Ser Asn Ala Thr Ser Ser Glu Asp Phe Pro Pro Pro Ser Leu
 65 70 75 80
 Leu Gln Pro Pro Pro Ala Ala Ser Ser Thr Ser Gly Pro Gln Pro
 85 90 95
 Pro Pro Pro Gln Ser Leu Asn Leu Leu Ser Gln Ala Gln Leu Gln Ala
 100 105 110
 Gln Pro Leu Ala Pro Gly Gly Thr Gln Met Lys Lys Lys Ser Gly Phe
 115 120 125
 Gln Ile Thr Ser Val Thr Pro Ala Gln Ile Ser Ala Ser Ile Ser Ser
 130 135 140
 Asn Asn Ser Ile Ala Glu Asp Thr Glu Ser Tyr Asp Asp Leu Asp Glu
 145 150 155 160
 Ser His Thr Glu Asp Leu Ser Ser Ser Glu Ile Leu Asp Val Ser Leu
 165 170 175
 Ser Arg Ala Thr Asp Leu Gly Glu Pro Glu Arg Ser Ser Glu Glu
 180 185 190
 Thr Leu Asn Asn Phe Gln Glu Ala Glu Thr Pro Gly Ala Val Ser Pro
 195 200 205
 Asn Gln Pro His Leu Pro Gln Pro His Leu Pro His Leu Pro Gln Gln
 210 215 220
 Asn Val Val Ile Asn Gly Asn Ala His Pro His His Leu His His
 225 230 235 240
 His Gln Ile His His Gly His His Leu Gln His Gly His His His Pro
 245 250 255
 Ser His Val Ala Val Ala Ser Ala Ser Ile Thr Gly Gly Pro Pro Ser
 260 265 270
 Ser Pro Val Ser Arg Lys Leu Ser Thr Thr Gly Ser Ser Asp Ser Ile
 275 280 285
 Thr Pro Val Ala Pro Thr Ser Ala Val Ser Ser Ser Gly Ser Pro Ala

290	295	300
Ser Val Met Thr Asn Met Arg Ala Pro Ser Thr Thr Gly Gly Ile Gly		
305	310	315
Ile Asn Ser Val Thr Gly Thr Ser Thr Val Asn Asn Val Asn Ile Thr		
	325	330
Ala Val Gly Ser Phe Asn Ser		
	340	

<210> 2861

<211> 756

<212> DNA

<213> Homo sapiens

<400> 2861

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 120
 aatgggaaca agggccctcc agttggctca aggataagca tgccaaccac aaagcctcg
 180
 ccaggactga gagaagaaaa attagcaagt atcatgagta agctgccact agctactccc
 240
 aaaaaactag attctactca gactacacat tcttcagtc ttattgctgg tcacacaggg
 300
 ccagttaccaa agaaacccca ggattnagct catactggca tctcttcagg ccttattgct
 360
 ggttcttcca ttcaagaaccc taaagttctt ttagaacctt tgccagccag gctacttcaa
 420
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 480
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<210> 2862

<211> 252

<212> PRT

<213> Homo sapiens

<400> 2862

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Ser Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val			
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Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg			

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Glu	Glu	Lys		
Leu	Ala	Ser		
Ile	Met	Ser		
Lys	Leu	Pro		
Asp	Ala	Thr		
Ser	Thr	Pro		
Gln	Thr	His		
Thr	His	Ser		
Ser	Ser	Ser		
Leu	Ile	Ile		
		Ala		
65	70	75	80	
Lys	Lys	Asp		
Leu	Asp	Ser		
		Thr		
		Gln		
		Thr		
		His		
		Ser		
		Ser		
		Leu		
		Ile		
85		90	95	
Gly	His	Thr	Gly	
			Pro	
			Val	
			Pro	
			Lys	
			Pro	
			Gln	
			Asp	
			Leu	
			Ala	
			His	
			Thr	
100		105	110	
Gly	Ile	Ser	Ser	
		Gly		
		Leu		
		Ile		
		Ala		
		Gly		
		Ser		
		Ser		
		Ile		
		Gln		
		Asn		
		Pro		
		Lys		
115		120	125	
Val	Ser	Leu	Glu	
		Pro	Leu	
		Pro	Ala	
		Arg	Leu	
		Leu	Gln	
		Gln	Gln	
		Gly	Leu	
		Leu	Gln	
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Arg	Ser	Ser	Gln	
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		Gln	Gln	
		Thr	His	
		His	Val	
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		Gln	Ile	
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		Ala	Ala	
		Ser	Ser	
		Ser	His	
		His	Ala	
		Leu	Gly	
		Gly	Thr	
165		170	175	
Ser	Glu	Ala	Gln	
		Asp	Asp	
		Ala	Ala	
		Ser	Ser	
		Leu	Thr	
		Thr	Gln	
		Gln	Val	
		Val	Thr	
		Thr	Lys	
		Lys	Val	
		Val	His	
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		Val	Gln	
		Gln	Gln	
		Asn	Tyr	
		Tyr	Val	
		Val	Ser	
		Pro	Leu	
		Gln	Gln	
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Ile	Ser	Lys	Ser	
		Gln	Gln	
		Thr	Thr	
		Asn	Pro	
		Pro	Val	
		Val	Val	
		Lys	Leu	
		Leu	Ser	
		Ser	Asn	
		Asn	Asn	
210		215	220	
Gln	Leu	Ser	Cys	
		Ser	Ser	
		Leu	Ile	
		Ile	Lys	
		Lys	Thr	
		Thr	Ser	
		Asp	Lys	
		Lys	Pro	
225		230	235	240
Met	Tyr	Arg	Leu	
		Pro	Leu	
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<210> 2863

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2863

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180
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240
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300
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420
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480
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540
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<210> 2864

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2864

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		20					25							30	
Ser	Gly	Arg	Ile	Val	Trp	Ser	Pro	Ala	Val	Pro	Gly	Ile	Pro	Val	Arg
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Ser	Ser	Ser	Leu	Pro	Leu	Phe	Ser	Asp	Ala	Met	Pro	Ala	Pro	Thr	Gln
	50					55					60				
Leu	Phe	Phe	Pro	Leu	Ile	Arg	Asn	Cys	Glu	Leu	Ser	Arg	Ile	Tyr	Gly
65					70				75					80	
Thr	Ala	Cys	Tyr	Cys	His	His	Lys	His	Leu	Cys	Cys	Ser	Ser	Ser	Tyr
		85					90							95	
Ile	Pro	Gln	Ser	Arg	Leu	Arg	Tyr	Thr	Pro	His	Pro	Ala	Tyr	Ala	Thr
	100					105							110		
Phe	Cys	Arg	Pro	Lys	Glu	Asn	Trp	Trp	Gln	Tyr	Thr	Gln	Gly	Arg	Arg
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Tyr	Ala	Ser	Thr	Pro	Gln	Lys	Phe	Tyr	Leu	Thr	Pro	Pro	Gln	Val	Asn
	130					135					140				
Ser	Ile	Leu	Lys	Ala	Asn	Glu	Tyr	Ser	Phe	Lys	Val	Pro	Glu	Phe	Asp
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	165					170					175				
Ala	Asn	Ala	Pro	Ile	Glu	Asp	Arg	Arg	Ser	Ala	Ala	Thr	Cys	Leu	Gln
	180					185							190		
Thr	Arg	Gly	Met	Leu	Leu	Gly	Val	Phe	Asp	Gly	His	Ala	Gly	Cys	Ala
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Cys	Ser	Gln	Ala	Val	Ser	Glu	Arg	Leu	Phe	Tyr	Tyr	Ile	Ala	Val	Ser
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225					230				235						

<210> 2865

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2865

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180					
tgtgtctcca	gaagcaaacg	agacatttct	tcatataaaat	ggaaaacaga	ttccatcata
240					

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300
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360
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480
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585

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<211> 134
<212> PRT
<213> Homo sapiens

<400> 2866
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 20 25 30
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 35 40 45
 Arg Asp Ile Ser Ser Tyr Lys Trp Lys Thr Asp Ser Ile Ile Gly Pro
 50 55 60
 Ile Arg Leu Lys Arg Asp Arg Ser Ala Ser Gly Asn Ser Gly Phe Gln
 65 70 75 80
 His Glu Thr His Ala Glu Glu Thr Pro Asn Gln Pro Phe Asn Ser Val
 85 90 95
 His Leu Phe Ser Phe Met Val Leu Ala Leu Asn Val Val Thr Val Ala
 100 105 110
 Thr Ile Thr Val Arg His Phe Val Asn Gln Arg Ala Asp Tyr Lys Tyr
 115 120 125
 Gln Lys Leu Gln Asn Tyr
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<210> 2867
<211> 444
<212> DNA
<213> *Homo sapiens*

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120
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180
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240
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300
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<210> 2868
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 <213> Homo sapiens

<400> 2868
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 20 25 30
 Ala Lys Ala Ser Gly Lys Lys Leu Gln Lys Val Thr Leu Lys Val Ser
 35 40 45
 Pro Arg Gly Ile Ile Leu His Pro Gly His His Pro Ala Pro Arg Gln
 50 55 60
 His Cys Cys His Ser Arg Leu Val Ala Ala Ala Pro Arg Pro Cys Trp
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 Trp Cys Trp Arg

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 <212> DNA
 <213> Homo sapiens

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 240
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<210> 2870
 <211> 258
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Met Glu Met Ile Ala Ala Leu Gly Pro Gly Pro Ser Pro Tyr Pro
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 Leu Pro Pro Pro Gly Gly Thr Asn Ser Asn Asp Tyr Ser Ser Gln
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 Pro Gly Gly Thr Ser Met Asn Asp Phe Met His Gly Pro Pro Gln Leu
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 Ser His Pro Pro Asp Met Pro Asn Asn Met Ala Ala Leu Glu Lys Pro
 115 120 125
 Leu Ser His Pro Met Gln Glu Thr Met Pro His Ala Gly Ser Ser Asp
 130 135 140
 Gln Pro His Pro Ser Ile Gln Gln Gly Leu His Val Pro His Pro Ser
 145 150 155 160
 Ser Gln Ser Gly Pro Pro Leu His His Ser Gly Ala Pro Pro Pro Pro
 165 170 175
 Pro Ser Gln Pro Pro Arg Gln Pro Pro Gln Ala Ala Pro Ser Ser His
 180 185 190
 Pro His Ser Asp Leu Thr Phe Asn Pro Ser Ser Ala Leu Glu Gly Gln
 195 200 205
 Ala Gly Ala Gln Gly Ala Ser Asp Met Pro Glu Pro Ser Leu Asp Leu
 210 215 220
 Leu Pro Glu Leu Thr Asn Pro Asp Glu Leu Leu Ser Tyr Leu Asp Pro
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 Asn Asn

<210> 2871
 <211> 786

<212> DNA

<213> Homo sapiens

<400> 2871

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<211> 153

<212> PRT

<213> Homo sapiens

<400> 2872

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Gln	His	Thr	Ser	Arg	Val	Leu	Gly	Ile	Glu	Leu	Glu	Gln	Ala	Val	
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Glu	Asp	Ala	Arg	Trp	Thr	Ala	Ala	Phe	Asn	Gly	Ile	Thr	Asn	Ser	Glu
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Phe	His	Thr	Gly	Gln	Ala	Glu	Lys	Ile	Leu	Pro	Gly	Leu	Leu	Lys	Ser
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<212> DNA
<213> Homo sapiens

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<210> 2874
<211> 248
<212> PRT

<213> Homo sapiens

<400> 2874

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Lys Leu Lys Ala Ser Ser Arg Thr Ser Ala Leu Leu Ser Gly Phe Ala
 35          40          45
Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro
 50          55          60
Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala
 65          70          75          80
Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile
 85          90          95
Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His
100         105         110
Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val
115         120         125
Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp Val
130         135         140
Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg Pro Thr Ser
145         150         155         160
Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile
165         170         175
Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro
180         185         190
Phe Gly Leu Ile Phe Ile Val Phe Ala Val His Phe Tyr Arg Ser Leu
195         200         205
Val Ser His Lys Thr Asp Arg Gln Phe Gln Glu Leu Asn Glu Leu Ala
210         215         220
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<211> 593

<212> DNA

<213> Homo sapiens

<400> 2875

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360

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<212> PRT
<213> Homo sapiens

<400> 2876
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35 40 45
Pro Gly Pro Lys Thr Val Thr Leu Lys Arg Thr Ser Gln Gly Phe Gly
50 55 60
Phe Thr Leu Arg His Phe Ile Val Tyr Pro Pro Glu Ser Ala Ile Gln
65 70 75 80
Phe Ser Tyr Lys Asp Glu Glu Asn Gly Asn Arg Gly Gly Lys Gln Arg
85 90 95
Asn Arg Leu Glu Pro Met Asp Thr Ile Phe Val Lys Gln Val Lys Glu
100 105 110
Gly Gly Pro Ala Phe Glu Ala Gly Leu Cys Thr Gly Asp Arg Ile Ile
115 120 125
Lys Val Asn Gly Glu Ser Val Ile Gly Lys Thr Tyr Ser Gln Val Ile
130 135 140
Ala Leu Ile Gln Asn Ser Asp Thr Thr Leu Glu Leu Ser Val Met Pro
145 150 155 160
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<211> 1921
<212> DNA
<213> Homo sapiens

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<210> 2878
 <211> 451
 <212> PRT
 <213> Homo sapiens

<400> 2878
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 Thr Glu Glu Gly Lys Glu Val Trp Asp Tyr Val Thr Val Arg Lys Asp
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 Ala Tyr Met Phe Trp Trp Leu Tyr Tyr Ala Thr Thr Pro Ala Arg Thr
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 Ser Glu Leu Pro Leu Val Met Trp Leu Gln Gly Pro Gly Gly Ser
 65 70 75 80
 Ser Thr Gly Phe Gly Asn Phe Glu Glu Ile Gly Pro Leu Asp Ser Asp
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 Leu Lys Pro Arg Lys Thr Thr Trp Leu Gln Ala Ala Ser Leu Leu Phe
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 Val Asp Asn Pro Val Gly Thr Gly Phe Ser Tyr Val Asn Gly Ser Gly
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 145 150 155 160
 Tyr Ile Phe Ser Glu Ser Tyr Gly Gly Lys Met Ala Ala Gly Ile Gly
 165 170 175
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 180 185 190
 Ala Gly Val Ala Leu Gly Asp Ser Trp Ile Ser Pro Val Asp Ser Val
 195 200 205
 Leu Ser Trp Gly Pro Tyr Leu Tyr Ser Met Ser Leu Leu Glu Asp Lys
 210 215 220
 Gly Leu Ala Glu Val Ser Lys Val Ala Glu Gln Val Leu Asn Ala Val
 225 230 235 240
 Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu Leu Trp Gly Lys Ala Glu
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 Thr Lys Ser Thr Pro Thr Ser Thr Met Glu Ser Ser Leu Glu Phe Thr
 275 280 285
 Gln Ser His Leu Val Cys Leu Cys Gln Arg His Val Arg His Leu Gln
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 Arg Asp Ala Leu Ser Gln Leu Met Asn Gly Pro Ile Arg Lys Lys Leu
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 Lys Ile Ile Pro Glu Asp Gln Ser Trp Gly Gly Gln Ala Thr Asn Val

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355	360	365
Leu Asp Leu Ile Val Asp Thr Ile Gly Gln Glu Ala Trp Val Arg Lys		
370	375	380
Leu Lys Trp Pro Glu Leu Ser Arg Phe Asn Gln Leu Lys Trp Lys Ala		
385	390	395
Leu Tyr Ser Asp Pro Lys Ser Leu Glu Thr Ser Ala Phe Val Lys Ser		
405	410	415
Tyr Lys Asn Leu Ala Phe Tyr Trp Ile Leu Lys Ala Gly His Met Val		
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<210> 2879

<211> 1352

<212> DNA

<213> Homo sapiens

<400> 2879

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 <212> PRT
 <213> Homo sapiens

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 Asp Trp Tyr Leu Val Thr Gly Ser Ser Leu Thr Cys Thr Pro Gly Pro
 50 55 60
 Ala Arg Gly Glu Arg Pro Pro Arg Leu Gly Leu Pro Thr Pro Gly Val
 65 70 75 80
 Pro Val Xaa Asp Lys Tyr Ala Pro Lys Leu Asp Ser Pro Tyr Phe Arg
 85 90 95
 His Ser Ser Val Ser Phe Phe Pro Ser Phe Pro Pro Ala Ile Pro Gly
 100 105 110
 Leu Pro Thr Leu Leu Pro His Pro Gly Pro Phe Gly Ser Leu Gln Gly
 115 120 125
 Ala Phe Gln Pro Lys Thr Ser Ser Pro Ile Glu Val Ala Arg Arg Ala
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 Gly Ala Val His Thr Leu Leu Gln Lys Ala Pro Gly Val Ser Asp Pro
 145 150 155 160
 Tyr Arg Ala Val Val Lys Lys Pro Gly Arg Trp Cys Ala Val His Val
 165 170 175
 Gln Ile Ala Trp Gln Ile Tyr Arg His Gln Gln Lys Ile Lys Glu Met
 180 185 190
 Gln Leu Asp Pro His Lys Leu Glu Val Gly Ala Lys Leu Asp Leu Phe
 195 200 205
 Gly Arg Pro Pro Ala Pro Gly Val Phe Ala Gly Phe His Tyr Pro Gln
 210 215 220
 Asp Leu Ala Arg Pro Leu Phe Pro Ser Thr Gly Ala Ala His Pro Ala
 225 230 235 240
 Ser Asn Pro Phe Gly Pro Ser Ala His Pro Gly Ser Phe Leu Pro Thr

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260	265	270
Gly Ser Leu Ser Ser His Ala Phe Gly Gly Leu Gly Ser His Ala Leu		
275	280	285
Ala Pro Gly Gly Ser Ile Phe Ala Pro Lys Glu Gly Ser Ser Val Leu		
290	295	300
Gly Leu Pro Ser Pro His Glu Ala Trp Ser Arg Leu His Arg Ala Pro		
305	310	315
Pro Ser Phe Pro Ala Pro Pro Trp Pro Lys Ser Val Asp Ala Glu		
325	330	335
Arg Val Ser Ala Leu Thr Asn His Asp Arg Glu Pro Val Asn Gly Lys		
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Glu Glu Gln Glu Arg Asp Leu Leu Glu Lys Thr Arg Leu Leu Ser Arg		
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<211> 3021

<212> DNA

<213> Homo sapiens

<400> 2881

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2520

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2760
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2820
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2880
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3021

<210> 2882

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2882

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      20          25          30
Val His Pro Gln His Phe Leu Arg Lys Arg Thr Pro Ala Gln Ala Gly
      35          40          45
Pro Ala Ile Ser Pro Leu Pro Thr Asp Ser Gln Ser Pro Leu Ala Ser
      50          55          60
Pro Leu Asp Val Ser Gly Gln Gly Ser Gly Gly Cys Ser Phe Asp Lys
      65          70          75          80
Lys Lys Lys Lys Phe Tyr Val Phe Lys Leu Leu Leu Gln Asp Phe Asn
      85          90          95

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<210> 2883

<211> 516

<212> DNA

<213> Homo sapiens

<400> 2883

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120 tacgggtgc ccacacctcc taaaaatgtct cccctggacg tgctggagcc ggagcagacc
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300

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 420
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<210> 2884

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2884

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															20
Pro	Ser	Ser	Val	Asp	Thr	Tyr	Pro	Tyr	Gly	Leu	Pro	Thr	Pro	Pro	Glu
															35
Met	Ser	Pro	Leu	Asp	Val	Leu	Glu	Pro	Glu	Gln	Thr	Phe	Phe	Ser	Ser
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Pro	Cys	Gln	Glu	Glu	His	Gly	His	Pro	Arg	Arg	Ile	Pro	His	Leu	Pro
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Gly	His	Pro	Tyr	Ser	Pro	Glu	Tyr	Ala	Pro	Ser	Pro	Leu	His	Cys	Ser
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His	Pro	Leu	Gly	Ser	Leu	Ala	Leu	Gly	Gln	Ser	Pro	Gly	Val	Ser	Met
															100
Met	Ser	Pro	Val	Pro	Gly	Cys	Pro	Pro	Ser	Pro	Ala	Tyr	Tyr	Ser	Pro
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Ala	Thr	Tyr	His	Pro	Leu	His	Ser	Asn	Leu	Gln	Ala	His	Leu	Gly	Gln
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Leu	Ser	Pro	Pro	Pro	Glu	His	Pro	Gly	Phe	Asp	Ala	Leu	Asp	Gln	Leu
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Asn	Gln	Gly	Glu	Leu	Leu	Gly	Asp	Met	Asp	Arg	Asn				
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<210> 2885

<211> 807

<212> DNA

<213> Homo sapiens

<400> 2885

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 120
 aagcaaaaagg aaactataaa agctttcta aagaaaactag aagccctcat agcaagcaat
 180
 gacaatgccca ataaaacctg caagatgtat ttagccacag aagaaacctc tcctgacatt
 240
 gtttggatatca aaaggactt ggaggcccta agcaaacaat gcaacaagtt actggaccga
 300

gcccaagcca gagaagagca gggtgaaggg acaattaagc gccttgaaga attttacagc
 360
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 480
 aaagaagaga ttgaaccctt gcaaggtaaa cagcaagatg taaaactggtt aggtcaagg
 540
 cttattcaga gtgctgccaa aagcaactagc actcagggct tggagcatga cctggatgat
 600
 660
 gtcaatgcac ggtggaagac tctcaataag aaggtggctc agcgagcagc ccagctgcag
 720
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 780
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 807
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<210> 2886

<211> 269

<212> PRT

<213> Homo sapiens

<400> 2886

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									20		25		30		
Gly	Arg	Asp	Ala	Glu	Thr	Leu	Gln	Lys	Gln	Glu	Thr	Ile	Lys	Ala	
								35		40		45			
Phe	Leu	Lys	Leu	Glu	Ala	Leu	Ile	Ala	Ser	Asn	Asp	Asn	Ala	Asn	
							50		55		60				
Lys	Thr	Cys	Lys	Met	Met	Leu	Ala	Thr	Glu	Glu	Thr	Ser	Pro	Asp	Leu
							65		70		75		80		
Val	Gly	Ile	Lys	Arg	Asp	Leu	Glu	Ala	Leu	Ser	Lys	Gln	Cys	Asn	Lys
							85		90		95				
Leu	Leu	Asp	Arg	Ala	Gln	Ala	Arg	Glu	Glu	Gln	Val	Glu	Gly	Thr	Ile
							100		105		110				
Lys	Arg	Leu	Glu	Glu	Phe	Tyr	Ser	Lys	Leu	Lys	Glu	Phe	Ser	Ile	Leu
							115		120		125				
Leu	Gln	Lys	Ala	Glu	Glu	His	Glu	Ser	Gln	Gly	Pro	Val	Gly	Met	
							130		135		140				
Glu	Thr	Glu	Thr	Ile	Asn	Gln	Gln	Leu	Asn	Met	Phe	Lys	Val	Phe	Gln
							145		150		155		160		
Lys	Glu	Glu	Ile	Glu	Pro	Leu	Gln	Gly	Lys	Gln	Gln	Asp	Val	Asn	Trp
							165		170		175				
Leu	Gly	Gln	Gly	Leu	Ile	Gln	Ser	Ala	Ala	Lys	Ser	Thr	Ser	Thr	Gln
							180		185		190				
Gly	Leu	Glu	His	Asp	Leu	Asp	Asp	Val	Asn	Ala	Arg	Trp	Lys	Thr	Leu
							195		200		205				
Asn	Lys	Lys	Val	Ala	Gln	Arg	Ala	Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu
							210		215		220				
His	Cys	Gly	Arg	Phe	Gln	Asp	Ala	Leu	Glu	Ser	Leu	Leu	Ser	Trp	Met

225	230	235	240
Val Asp Thr Glu Glu Leu Val Ala Asn Gln Lys Pro Pro Ser Ala Glu			
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Phe Lys Val Val Lys Asp Lys Ile Gln Glu Gln Lys Leu			
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<210> 2887
<211> 1945
<212> DNA
<213> Homo sapiens

<400> 2887
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120
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180
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240
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360
aagggtggc actgggcacc gaggcaggtg ggtgtctacc tccctccccgg gcgagtagga
420
tgtgtctcga ttaggggttc tccctcccttc cccggcgatg ggctggactc tggccttgcc
480
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720
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960
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1020
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1260

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 1920
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 1945

<210> 2888
 <211> 315
 <212> PRT
 <213> Homo sapiens

<400> 2888
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 35 40 45
 Thr Ser Thr Lys Ser Thr Arg Thr Ser Ala Arg Pro Gly Leu Thr Ala
 50 55 60
 Thr Val Ser Ile Gly Leu Ser Asp Ser Pro Thr Trp Arg His Cys Trp
 65 70 75 80
 Met Thr Ala Arg Ser Cys Ser Gly Glu Lys Gly Gly His Trp Ala Pro
 85 90 95
 Arg Gln Val Gly Val Tyr Leu Leu Pro Gly Arg Val Gly Cys Val Ser
 100 105 110
 Ser Arg Val Ser Pro Ser Phe Pro Gly Asp Gly Leu Asp Ser Gly Leu
 115 120 125
 Ala Arg Arg Gly Ser Ala Val Ser Ala Leu Ala Ser Gly Leu Val Glu
 130 135 140
 Glu Pro Met Leu Gly Pro Pro Phe His Pro Thr Pro Arg Phe Lys Ala
 145 150 155 160
 Val Ser Ala Lys Ser Lys Glu Asp Leu Val Ser Gln Gly Phe Thr Glu
 165 170 175
 Phe Thr Ile Glu Asp Phe His Asn Thr Phe Met Asp Leu Ile Glu Gln

180	185	190
Val Glu Lys Gln Thr Ser Val Ala Asp Leu Leu Ala Ser Phe Asn Asp		
195	200	205
Gln Ser Thr Ser Asp Tyr Leu Val Val Tyr Leu Arg Leu Leu Thr Ser		
210	215	220
Gly Tyr Leu Gln Arg Glu Ser Lys Phe Phe Glu His Phe Ile Glu Gly		
225	230	235
Gly Arg Thr Val Lys Glu Phe Cys Gln Gln Glu Val Glu Pro Met Cys		
245	250	255
Lys Glu Ser Asp His Ile His Ile Ile Ala Leu Ala Gln Ala Leu Ser		
260	265	270
Val Ser Ile Gln Val Glu Tyr Met Asp Arg Gly Glu Gly Gly Thr Thr		
275	280	285
Asn Pro His Ile Phe Pro Glu Gly Ser Glu Pro Lys Val Tyr Leu Leu		
290	295	300
Tyr Arg Pro Gly His Tyr Asp Ile Leu Tyr Lys		
305	310	315

<210> 2889

<211> 614

<212> DNA

<213> Homo sapiens

<400> 2889

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 180
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 240
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 360
 420
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 540
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 614

<210> 2890

<211> 204

<212> PRT

<213> Homo sapiens

<400> 2890

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		20				25					30				
Pro	Glu	Val	Lys	Leu	Pro	Arg	Ala	Pro	Glu	Val	Gln	Leu	Lys	Ala	Thr
		35				40					45				
Lys	Ala	Glu	Gln	Ala	Glu	Gly	Met	Glu	Phe	Gly	Phe	Lys	Met	Pro	Lys
		50			55					60					
Met	Thr	Met	Pro	Lys	Leu	Gly	Arg	Ala	Glu	Ser	Pro	Ser	Arg	Gly	Lys
		65			70					75			80		
Pro	Gly	Glu	Ala	Gly	Ala	Glu	Val	Ser	Gly	Lys	Leu	Val	Thr	Leu	Pro
		85			90					95					
Cys	Leu	Gln	Pro	Glu	Val	Asp	Gly	Glu	Ala	His	Val	Gly	Val	Pro	Ser
		100			105					110					
Leu	Thr	Leu	Pro	Ser	Val	Glu	Leu	Asp	Leu	Pro	Gly	Ala	Leu	Gly	Leu
		115			120					125					
Gln	Gly	Gln	Val	Pro	Ala	Ala	Lys	Met	Gly	Lys	Gly	Glu	Arg	Ala	Glu
		130			135					140					
Gly	Pro	Glu	Val	Ala	Ala	Gly	Val	Arg	Glu	Val	Gly	Phe	Arg	Val	Pro
		145			150					155			160		
Ser	Val	Glu	Ile	Val	Thr	Pro	Gln	Leu	Pro	Ala	Val	Glu	Ile	Glu	Glu
		165			170					175					
Gly	Arg	Leu	Glu	Met	Ile	Glu	Thr	Lys	Val	Lys	Pro	Ser	Ser	Lys	Phe
		180			185					190					
Ser	Leu	Pro	Lys	Phe	Gly	Leu	Ser	Gly	Pro	Lys	Val				
		195			200										

<210> 2891

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2891

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120					
ccaaccaacc	aacaaaacta	aaagtgatac	tgacacagtt	caggtgataa	gcaggaaaat
180					
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240					
ggaaaagcaa	cggcgtaagt	caatgtgatg	aagaggtcca	gcctctcgtc	gggaacttgg
300					
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360					
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420					
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480					
cgttcttctc	ggagcttggg	gttccttgcc	ctccaccagt	ggggacggtg	cagtcttgg
540					
cagctgctct	tctgggggtgg	gggcc			
565					

<210> 2892

<211> 90
<212> PRT
<213> Homo sapiens

<400> 2892
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Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg
35 40 45
Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser
50 55 60
Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val
65 70 75 80
Ser Asp Asn Pro Ile Phe Leu Leu Ile Thr
85 90

<210> 2893
<211> 2270
<212> DNA
<213> Homo sapiens

<400> 2893
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660
720
780
840
900

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2100
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2270

<210> 2894
<211> 490
<212> PRT
<213> Homo sapiens

<400> 2894
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Gly	Gly	Ser	Gly
Gly	Gly	Gly	Ser
Ala	Arg	Gly	Tyr
Cys	Arg		
20	25	30	
Gln	Val	Ser	Val
Val	Ser	Leu	His
His	Pro	Gly	Thr
Gly	Leu	Phe	Ser
Pro	Phe		
35	40	45	
Cys	Ser	Val	Pro
Val	Pro	Leu	Trp
Trp	Cys	Ile	Tyr
Ile	Tyr	Phe	Leu
Phe	Ser	Phe	Cys
Cys	Ile	Val	
50	55	60	
Leu	Ser	Leu	Pro
Pro	Ser	Ala	Ser
Ala	Ser	Leu	His
Leu	Cys	Leu	Ser
Ser	Cys	Leu	His
65	70	75	80
Phe	Leu	Asn	Leu
Asn	Leu	Asp	Cys
Cys	Pro	Cys	Leu
Leu	Phe	Leu	Cys
Cys	His	Ser	Leu
His	Ser	Cys	Leu
75	80	85	90
Ser	Pro	Ser	Val
Val	Cys	Gly	Ser
Gly	Ala	Ser	Leu
Ala	Ser	Leu	Ser
Leu	Ser	His	Ser
His	Ser	Pro	Tyr
Tyr	Asn	Ser	Asn
Asn	100	105	110
Trp	Pro	Leu	Pro
Leu	Pro	Ala	Gln
Gln	Thr	Phe	Leu
Thr	Phe	Asp	Glu
Asp	Leu	His	Glu
Glu	Thr	Gly	Thr
Thr	Gly	Pro	Gly
Gly	Ser	Gly	Ser
Ser	Thr	Pro	Thr
Pro	115	120	125
Gln	Leu	His	Ser
His	Ser	Met	Ser
Met	Ser	Thr	Trp
Thr	Trp	Met	Glu
Glu	Leu	Tyr	Pro
Pro	Ala	Val	Ser
Ala	Val	Ser	130
Ser	135	140	
Thr	Asp	Val	Arg
Arg	Phe	Ala	Asn
Asn	Met	Leu	Gly
Gly	Gln	Pro	Gly
Pro	145	150	155
155	160		
Leu	Asp	Leu	Phe
Phe	Lys	Phe	Tyr
Tyr	Val	Glu	Glu
Glu	Leu	Lys	Ala
Ala	Arg	Phe	His
His	165	170	175
Asp	Glu	Lys	Ile
Ile	Ile	Lys	Asp
Asp	Ile	Leu	Lys
Lys	Asp	Arg	Gly
Gly	Phe	Cys	
	180	185	190
Val	Glu	Val	Asn
Asn	Thr	Ala	Phe
Phe	Glu	Asp	Phe
Asp	Ala	His	Val
His	Val	Ile	Ser
Ser	Phe	195	200
195	200	205	
Asp	Lys	Arg	Ala
Ala	Ala	Ala	Leu
Leu	Asp	Ala	Gly
Gly	Asn	Ile	Asn
Ile	Lys	Leu	Thr
Thr	Leu	Thr	Phe
Phe	210	215	220
Asn	Ser	Leu	Leu
Leu	Glu	Lys	Ala
Ala	Glu	Ala	Arg
Arg	Glu	Glu	Arg
Arg	225	230	235
235	240		
Glu	Glu	Ala	Arg
Ala	Arg	Arg	Met
Arg	Arg	Arg	Arg
Arg	245	250	255
255			
Leu	Arg	Gln	Ala
Ala	Val	Pro	Ala
Pro	Leu	Glu	Leu
Gly	Thr	Ala	Trp
Trp	260	265	270
260	265	270	
Val	Arg	Glu	Arg
Arg	Phe	Val	Cys
Cys	Asp	Ser	Ala
Ala	Phe	Glu	Gln
Gln	Ile	Thr	Leu
Leu	275	280	285
275	280	285	
Glu	Ser	Glu	Arg
Arg	Ile	Arg	Leu
Leu	Phe	Arg	Glu
Glu	290	295	300
290	295	300	
Thr	Glu	Cys	Gln
Gln	His	Leu	His
His	Thr	Lys	Gly
Gly	Arg	Arg	Lys
Arg	305	310	315
310	315	320	
Gly	Lys	Lys	His
His	His	Lys	Arg
Arg	Ser	His	Ser
Ser	His	Pro	Ser
Pro	325	330	335
325	330	335	
Ser	Glu	Glu	Glu
Glu	Leu	Pro	Pro
Pro	Pro	Ser	Leu
Leu	Arg	Arg	Pro
Arg	340	345	350
340	345	350	
Arg	Arg	Arg	Asn
Asn	Pro	Ser	Glu
Glu	Ser	Gly	Ser
Ser	Gly	Ser	Glu
Glu	355	360	365
355	360	365	
Asp	Ser	Val	Glu
Glu	Ser	Gly	Gly
Gly	Ala	Ala	Leu
Leu	Gly	Gly	Arg
Arg	370	375	380
370	375	380	
Ser	Ser	His	Leu
His	Leu	Leu	Gly
Gly	Ala	Asp	His
Asp	His	Gly	Leu
Leu	Arg	Lys	Ala
Ala	Lys	Lys	Lys
385	390	395	400
390	395	400	
Pro	Lys	Lys	Thr
Thr	Lys	Lys	Arg
Arg	Arg	Arg	His
His	Lys	Ser	Asn
Ser	Asn	Ser	Pro
Pro	405	410	415
405	410	415	
Ser	Glu	Thr	Asp
Asp	Pro	Glu	Glu
Glu	Glu	Lys	Ala
Ala	Gly	Lys	Glu
Gly	420	425	430
420	425	430	
Glu	Gln	Glu	Gln
Gln	Glu	Asp	Arg
Arg	Glu	Leu	Gln
Gln	Ala	Glu	Leu
Leu	Pro		

435	440	445
Asn Arg Ser Pro Gly Phe Gly Ile Lys Lys Glu Lys Thr Gly Trp Asp		
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Thr Ser Glu Ser Glu Leu Ser Glu Gly Glu Leu Glu Arg Arg Arg Arg		
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Thr Leu Leu Gln Gln Leu Asp Asp His Gln		
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<210> 2895

<211> 697

<212> DNA

<213> Homo sapiens

<400> 2895

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<210> 2896

<211> 174

<212> PRT

<213> Homo sapiens

<400> 2896

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Pro Leu Arg Gly Pro Ser Ala Thr Ser Ser Cys Arg Gly Gly Asn Ala			
35	40	45	
Pro Gln Gly Leu Gln Lys Gly Gly Gly Glu Ala Pro Val Leu Leu Leu			
50	55	60	
Gln Glu Leu Ala Gln Asp Ala Val Ala Pro Ala Val Ala Arg Arg Ser			

65	70	75	80
Ala Pro Ala Pro Cys Ser Asn Arg Leu Arg Ser Pro Ser Pro Pro Ser			
85	90	95	
Leu Pro Pro Asp Arg Pro Arg Pro Pro Ala Arg Arg His Ser Phe Arg			
100	105	110	
Gly Pro Ala Leu Arg Ser Gly Pro Pro Leu Pro Pro Pro Arg Arg			
115	120	125	
Pro Leu Leu Arg Pro Pro Val Ala Ala Ala Leu Pro Pro Gln Pro Ala			
130	135	140	
Pro Ser Leu Pro Ala Ser Arg Ala His Ser Cys Pro Gly Arg Pro Arg			
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Leu Gly Gly Val Glu Gln Pro Leu Glu Val Leu Gly Asp Ala			
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<210> 2897

<211> 3184

<212> DNA

<213> Homo sapiens

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880
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960
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Asn Glu Cys Val Gln Cys Glu Phe Asn Phe Ile Asn Thr Gly Lys Phe
 35 40 45
Thr Phe Ser Phe Gln Ala Gln Leu Cys Gly Ser Lys Thr Leu Leu Gln
 50 55 60
Tyr Leu Glu Phe Ser Pro Ile Asp Ser Thr Val Asp Val Gly Gln Ser
 65 70 75 80
Val His Ala Thr Leu Ser Phe Gln Pro Leu Lys Lys Cys Val Leu Thr
 85 90 95
Asp Leu Glu Leu Ile Ile Lys Ile Ser His Gly Pro Thr Phe Met Cys
 100 105 110
Asn Ile Ser Gly Cys Ala Val Ser Pro Ala Ile His Phe Ser Phe Thr
 115 120 125
Ser Tyr Asn Phe Gly Thr Cys Phe Ile Tyr Gln Ala Gly Met Pro Pro
 130 135 140
Tyr Lys Gln Thr Leu Val Ile Thr Asn Lys Glu Glu Thr Pro Met Ser
 145 150 155 160
Ile Asp Cys Leu Tyr Thr Asn Thr His Leu Glu Val Asn Ser Arg
 165 170 175
Val Asp Val Val Lys Pro Gly Asn Thr Leu Glu Ile Pro Ile Thr Phe
 180 185 190
Tyr Pro Arg Glu Ser Ile Asn Tyr Gln Glu Leu Ile Pro Phe Glu Ile
 195 200 205
Asn Gly Leu Ser Gln Gln Thr Val Glu Ile Lys Gly Lys Gly Thr Glu

210	215	220
Met Lys Ile Leu Val	Leu Asp Pro Ala Asn Arg	Ile Val Lys Leu Gly
225	230	235
Ala Val Leu Pro Gly Gln Val Val Lys Arg Thr Val Ser Ile Met Asn		240
245	250	255
Asn Ser Leu Ala Gln Leu Thr Phe Asn Gln Ser Ile Leu Phe Thr Ile		
260	265	270
Pro Glu Leu Gln Glu Pro Lys Val Leu Thr Leu Ala Pro Phe His Asn		
275	280	285
Ile Thr Leu Lys Pro Lys Glu Val Cys Lys Leu Glu Val Ile Phe Ala		
290	295	300
Pro Lys Lys Arg Val Pro Pro Phe Ser Glu Glu Val Phe Met Glu Cys		
305	310	315
Met Gly Leu Leu Arg Pro Leu Phe Leu Leu Ser Gly Cys Cys Gln Ala		320
325	330	335
Leu Glu Ile Ser Leu Asp Gln Glu His Ile Pro Phe Gly Pro Val Val		
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Tyr Gln Thr Gln Ala Thr Arg Arg Ile Leu Met Leu Asn Thr Gly Asp		
355	360	365
Val Gly Ala Arg Phe Lys Trp Asp Ile Lys Lys Phe Glu Pro His Phe		
370	375	380
Ser Ile Ser Pro Glu Glu Gly Tyr Ile Thr Ser Gly Met Glu Val Ser		
385	390	395
Phe Glu Val Thr Tyr His Pro Thr Glu Val Gly Lys Glu Ser Leu Cys		
405	410	415
Lys Asn Ile Leu Cys Tyr Ile Gln Gly Gly Ser Pro Leu Ser Leu Thr		
420	425	430
Leu Ser Gly Val Cys Val Gly Pro Pro Ala Val Lys Glu Val Val Asn		
435	440	445
Phe Thr Cys Gln Val Arg Ser Lys His Thr Gln Thr Ile Leu Leu Ser		
450	455	460
Asn Arg Thr Asn Gln Thr Trp Asn Leu His Pro Ile Phe Glu Gly Glu		
465	470	475
His Trp Glu Gly Pro Glu Phe Ile Thr Leu Glu Ala His Gln Gln Asn		
485	490	495
Lys Pro Tyr Glu Ile Thr Tyr Arg Pro Arg Thr Met Asn Leu Glu Asn		
500	505	510
Arg Lys His Gln Gly Thr Leu Phe Phe Pro Leu Pro Asp Gly Thr Gly		
515	520	525
Trp Leu Tyr Ala Leu His Gly Thr Ser Glu Leu Pro Lys Ala Val Ala		
530	535	540
Asn Ile Tyr Arg Glu Val Pro Cys Lys Thr Pro Tyr Thr Glu Leu Leu		
545	550	555
Pro Ile Thr Asn Trp Leu Asn Lys Pro Gln Arg Phe Arg Val Ile Val		
565	570	575
Glu Ile Leu Lys Pro Glu Lys Pro Asp Leu Ser Ile Thr Met Lys Gly		
580	585	590
Leu Asp Tyr Ile Asp Val Leu Ser Gly Ser Lys Lys Asp Tyr Lys Leu		
595	600	605
Asn Phe Phe Ser His Lys Glu Gly Thr Tyr Ala Ala Lys Val Ile Phe		
610	615	620
Arg Asn Glu Val Thr Asn Glu Phe Leu Tyr Tyr Asn Val Ser Phe Arg		
625	630	635
Val Ile Pro Ser Gly Ile Ile Lys Thr Ile Glu Met Val Thr Pro Val		640

645	650	655
Arg Gln Val Ala Ser Ala Ser Ile Lys Leu Glu Asn Pro Leu Pro Tyr		
660	665	670
Ser Val Thr Phe Ser Thr Glu Cys Arg Met Pro Asp Ile Ala Leu Pro		
675	680	685
Ser Gln Phe Val Val Pro Ala Asn Ser Glu Gly Thr Phe Ser Phe Glu		
690	695	700
Phe Gln Pro Leu Lys Ala Gly Glu Thr Phe Gly Arg Leu Thr Leu His		
705	710	715
Asn Thr Asp Leu Gly Tyr Tyr Gln Tyr Glu Leu Tyr Leu Lys Ala Thr		
725	730	735
Pro Ala Leu Pro Glu Lys Pro Val His Phe Gln Thr Val Leu Gly Ser		
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Ser Gln Ile Ile Leu Val Lys Phe Ile Asn Tyr Thr Arg Gln Arg Thr		
755	760	765
Glu Tyr Tyr Cys Arg Thr Asp Cys Thr Asp Phe His Ala Glu Lys Leu		
770	775	780
Ile Asn Ala Ala Pro Gly Gly Gln Gly Thr Glu Ala Ser Val Glu		
785	790	795
Val Leu Phe Glu Pro Ser His Leu Gly Glu Thr Lys Gly Ile Leu Ile		
805	810	815
Leu Ser Ser Leu Ala Gly Gly Glu Tyr Ile Ile Pro Leu Phe Gly Met		
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Ser Ile Ile Val Asp Asn Pro Ala Phe Thr Ile Arg Ala Gly Glu Ser		
865	870	875
Val Arg Pro Lys Lys Ile Asn Asn Ile Thr Val Ser Phe Glu Gly Asn		
885	890	895
Pro Ser Gly Ser Lys Thr Pro Ile Thr Thr Lys Leu Thr Val Ser Cys		
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Pro Pro Gly Glu Gly Ser Glu Thr Gly Val Lys Trp Val Tyr Tyr Leu		
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<210> 2899

<211> 876

<212> DNA

<213> Homo sapiens

<400> 2899

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<210> 2900
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 Tyr Lys Asn Gln Glu Leu Arg Ile Lys Phe Pro Asp Asn Pro Glu Lys
 50 55 60
 Phe Met Glu Ser Glu Leu Asp Leu Asn Asp Ile Ile Gln Glu Met His
 65 70 75 80
 Val Val Ala Thr Met Pro Asp Leu Tyr His Leu Leu Val Glu Leu Asn
 85 90 95
 Ala Val Gln Ser Leu Leu Gly Leu Leu Gly His Asp Asn Thr Asp Val
 100 105 110
 Ser Ile Ala Val Val Asp Leu Leu Gln Glu Leu Thr Asp Ile Asp Thr
 115 120 125
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 130 135 140
 Asp Gly Gln Val Val Ala Leu Leu Val Gln Asn Leu Glu Arg Leu Asp
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<210> 2901
 <211> 756

<212> DNA

<213> Homo sapiens

<400> 2901

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<210> 2902

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2902

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Glu	Ser	Leu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg	
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Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
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<210> 2903
<211> 542
<212> DNA
<213> Homo sapiens

<400> 2903
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240
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300
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gcagccaaca gccaccagg gcagatgctg gccagtata tagagagctt cacccaggc
420
tccatcgagg cccacaagag gggctcccgc ttctggatcc aggacaaagg ccccatcgt
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542

<210> 2904
<211> 180
<212> PRT
<213> Homo sapiens

<400> 2904
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20 25 30
Ala Lys Leu Ala Gln Asp Phe Leu Asp Ser Gln Asn Leu Ser Ala Tyr
35 40 45
Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr
50 55 60
Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser
65 70 75 80
Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe
85 90 95
Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu
100 105 110
Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln
115 120 125
Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

130	135	140
His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg		
145	150	155
Gly Glu Val Arg Arg Gln Leu His Pro Thr Cys Pro Leu Leu Pro Ala		
	165	170
Pro Pro Ser Arg		
	180	

<210> 2905
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<212> DNA
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180	
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240	
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300	
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360	
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420	
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480	
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540	
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600	
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720	
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780	
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814	

<210> 2906
<211> 200
<212> PRT
<213> Homo sapiens

<400> 2906		
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Asn Arg Ile Pro Val Thr Arg Ser Phe Phe Cys Ile Thr Asn Ser Ala		
	20	25
Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe		
	30	

35	40	45													
Cys	Cys	Pro	Pro	Lys	Arg	Lys	Thr	Cys	Ser	Trp	Ala	Trp	Trp	Tyr	Thr
50				55						60					
Ser	Val	Val	Pro	Val	Thr	Gln	Glu	Ala	Glu	Ala	Gly	Gly	Leu	Leu	Glu
65					70				75				80		
Pro	Arg	Cys	Ser	Arg	Leu	Gln	Trp	Ala	Val	Asn	Ala	Leu	Leu	His	Ser
									85	90			95		
Ser	Leu	Ser	Asn	Arg	Ala	Arg	Pro	Arg	Pro	Ser	Ser	Arg	Leu	Ser	Ile
									100	105			110		
Pro	Pro	Pro	Gln	His	Pro	Phe	Leu	Leu	Glu	Met	Gly	Phe	Gly	Val	Val
									115	120			125		
Asn	Gln	Ala	Gln	Gly	Asn	Leu	Arg	Gly	Pro	Ala	Ser	Ser	Val	Arg	Cys
								130	135			140			
Arg	Arg	Ser	Thr	Arg	Pro	Arg	Pro	Gly	Ser	Ala	Arg	Arg	Glu	Lys	Ala
145								150			155			160	
Ala	Thr	Pro	Gly	Val	Arg	Glu	Leu	Arg	Leu	Glu	Gly	Ala	Trp	Gln	Ala
								165		170			175		
Gly	Arg	Gly	Pro	Gly	Gly	Gly	Ser	Ala	Tyr	Asp	Arg	Arg	Trp	Gly	Glu
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Leu	Leu	Asp	Val	Lys	Gly	Pro	Leu								
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<210> 2907

<211> 379

<212> DNA

<213> Homo sapiens

<400> 2907

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 180
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 379

<210> 2908

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2908

Met Thr Val Ser Asp Arg Pro Ser Ala Gly Cys Asp Leu Pro Lys Leu
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 20 25 30
 Phe Pro Arg Leu Leu Ser Asn Phe Gln His Cys Pro Gln Asp Tyr Lys

35	40	45
Gly Lys Gly Ile Leu Pro Leu Met Leu Asp Gly Pro Glu Thr Ala Pro		
50	55	60
Pro Trp Ala His Tyr Thr Gly Thr Ser Phe Lys Leu Pro Cys Ser Thr		
65	70	75
Arg Arg Ala Pro Gln Pro Arg Thr Thr Glu Gln Met Met Ala Arg Arg		80
85	90	95
Pro Gln Asn Pro Asp Arg Pro Ser Trp Leu Ala Leu Ala Asp Ala Thr		
100	105	110
Gly		

<210> 2909

<211> 2420

<212> DNA

<213> Homo sapiens

<400> 2909

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120
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180
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300
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360
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catcattatg gggacatagt gtttccctat aaattcagaa attctctggt tgatgtaaaa
480
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540
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720
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1080

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 <210> 2910
 <211> 153
 <212> PRT
 <213> Homo sapiens

 <400> 2910
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Ser	Asn	Ala	Gly
Val	Trp	Leu	Leu
Leu	Leu	Leu	His
Arg			
20		25	30
Thr	Glu	Pro	Pro
Val	Phe	Cys	Leu
Arg	Ala	Ser	Phe
Met	Ala	Trp	Thr
35		40	45
Gly	Asn	Ala	Met
Cys	Ser	His	Lys
Thr	Thr	Ile	Val
Ile	Val	His	Gln
50		55	60
Leu	Tyr	Asn	Ile
Lys	Gly	Val	Ile
Tyr	Lys	Ser	Thr
Ala	Ile	Val	His
65		70	80
Arg	Met	Val	Met
Ala	Gly	Glu	Pro
Pro	Arg	Pro	Pro
Val	Leu	Cys	Ser
85		90	95
Ser	Thr	Gly	Glu
His	Leu	Gly	Ser
Cys	His	Lys	Ala
Arg	Gly	Gly	Gly
100		105	110
Ser	Leu	Gly	Leu
Ser	Trp	Gly	Arg
Gln	Gln	Val	Cys
Lys	Asp	Ser	Ser
115		120	125
Gly	Pro	Val	Leu
Thr	Gly	Ile	Arg
Gly	Gln	Glu	Arg
Gln	Val	Cys	Leu
130		135	140
Cys	Leu	Gly	Leu
Ile	Gly	Arg	Leu
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<210> 2911

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 2911

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 360
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 1200
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 1260
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 1327

<210> 2912
 <211> 350
 <212> PRT
 <213> Homo sapiens

<400> 2912
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 Arg Ser Ser Gly Gly Gly Trp Ala Asp Pro Arg Thr Cys Leu Ser
 35 40 45
 Leu Leu Ser Leu Gly Thr Cys Leu Gly Leu Ala Trp Phe Val Phe Gln
 50 55 60
 Gln Ser Glu Lys Phe Ala Lys Val Glu Asn Gln Tyr Gln Leu Leu Lys
 65 70 75 80
 Leu Glu Thr Asn Glu Phe Gln Gln Leu Gln Ser Lys Ile Ser Leu Ile
 85 90 95
 Ser Glu Lys Trp Gln Lys Ser Glu Ala Ile Met Glu Gln Leu Lys Ser
 100 105 110
 Phe Gln Ile Ile Ala His Leu Lys Arg Leu Gln Glu Glu Ile Asn Glu
 115 120 125
 Val Lys Thr Trp Ser Asn Arg Ile Thr Glu Lys Gln Asp Ile Leu Asn
 130 135 140
 Asn Ser Leu Thr Thr Leu Ser Gln Asp Ile Thr Lys Val Asp Gln Ser
 145 150 155 160
 Thr Thr Ser Met Ala Lys Asp Val Gly Leu Lys Ile Thr Ser Val Lys
 165 170 175
 Thr Asp Ile Arg Arg Ile Ser Gly Leu Val Thr Asp Val Ile Ser Leu
 180 185 190
 Thr Asp Ser Val Gln Glu Leu Glu Asn Lys Ile Glu Lys Val Glu Lys
 195 200 205
 Asn Thr Val Lys Asn Ile Gly Asp Leu Leu Ser Ser Ser Ile Asp Arg
 210 215 220
 Thr Ala Thr Leu Arg Lys Thr Ala Ser Glu Asn Ser Gln Arg Ile Asn

225	230	235	240
Ser Val Lys Lys Thr Leu Thr Glu Leu Lys Ser Asp Phe Asp Lys His			
245	250	255	
Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp Arg Ala Lys Val Leu Lys			
260	265	270	
Thr Val Thr Phe Ala Asn Asp Leu Lys Pro Lys Val Tyr Asn Leu Lys			
275	280	285	
Lys Asp Phe Ser Arg Leu Glu Pro Leu Val Asn Asp Leu Thr Leu Arg			
290	295	300	
Ile Gly Arg Leu Val Thr Asp Leu Leu Gln Arg Glu Lys Glu Ile Ala			
305	310	315	320
Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr Ile Val Gln Ala Glu Ile			
325	330	335	
Lys Asp Ile Lys Asp Glu Ile Ala His Ile Ser Asp Met Asn			
340	345	350	

<210> 2913

<211> 361

<212> DNA

<213> Homo sapiens

<400> 2913

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361

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<210> 2914

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2914

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Cys Asn Met Glu Ile Gly Ile Ile Arg Asn Gly Ser Gln Asp Gly			
35	40	45	
Pro Glu Pro Ser Ile Ser Gly Leu Lys Leu His Pro Gln Leu Ser			
50	55	60	
Leu Ser Glu Asp Val His Ala Pro Gln Val Ala Asn Asp Thr Glu Ala			
65	70	75	80
Gly Arg Lys Leu Asp Val Gly Pro Gln Leu Leu Asp Gln Leu Ala Gln			

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 1680
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<210> 2916
 <211> 519
 <212> PRT
 <213> Homo sapiens

<400> 2916
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 Ile Gln Glu Val Glu Leu Lys Ala Ser Ala Ala Asp Arg Glu Ile Tyr
 35 40 45
 Leu Leu Arg Thr Ser Leu His Arg Glu Arg Glu Gln Ala Gln Gln Leu
 50 55 60
 His Gln Leu Leu Ala Leu Lys Glu Gln Glu His Arg Lys Glu Leu Glu
 65 70 75 80
 Thr Arg Glu Phe Phe Thr Asp Ala Asp Phe Gln Asp Ala Leu Ala Lys
 85 90 95
 Glu Ile Ala Lys Glu Glu Lys Lys His Glu Gln Met Ile Lys Glu Tyr
 100 105 110
 Gln Glu Lys Ile Asp Val Leu Ser Gln Gln Tyr Met Asp Leu Glu Asn
 115 120 125
 Glu Phe Arg Ile Ala Leu Thr Val Glu Ala Arg Arg Phe Gln Asp Val
 130 135 140
 Lys Asp Gly Phe Glu Asn Val Ala Thr Glu Leu Ala Lys Ser Lys His
 145 150 155 160
 Ala Leu Ile Trp Ala Gln Arg Lys Glu Asn Glu Ser Ser Ser Leu Ile
 165 170 175
 Lys Asp Leu Thr Cys Met Val Lys Glu Gln Lys Thr Lys Leu Ala Glu
 180 185 190
 Val Ser Lys Leu Lys Gln Glu Thr Ala Ala Asn Leu Gln Asn Gln Ile
 195 200 205
 Asn Thr Leu Glu Ile Leu Ile Glu Asp Asp Lys Gln Lys Ser Ile Gln
 210 215 220
 Ile Glu Leu Leu Lys His Glu Lys Val Gln Leu Ile Ser Glu Leu Ala
 225 230 235 240
 Ala Lys Glu Ser Leu Ile Phe Gly Leu Arg Thr Glu Arg Lys Val Trp
 245 250 255
 Gly His Glu Leu Ala Gln Gln Gly Ser Ser Leu Ala Gln Asn Arg Gly

260	265	270
Lys Leu Glu Ala Gln Ile Glu Ser Leu Ser Arg Glu Asn Glu Cys Leu		
275	280	285
Arg Lys Thr Asn Glu Ser Asp Ser Asp Ala Leu Arg Ile Lys Cys Lys		
290	295	300
Ile Ile Asp Asp Gln Thr Glu Thr Ile Arg Lys Leu Lys Asp Cys Leu		
305	310	315
Gln Glu Lys Asp Glu His Ile Lys Arg Leu Gln Glu Lys Ile Thr Glu		
325	330	335
Ile Glu Lys Cys Thr Gln Glu Gln Leu Asp Glu Lys Ser Ser Gln Leu		
340	345	350
Asp Glu Val Leu Glu Lys Leu Glu Arg His Asn Glu Arg Lys Glu Lys		
355	360	365
Leu Lys Gln Gln Leu Lys Gly Lys Glu Val Glu Leu Glu Glu Ile Arg		
370	375	380
Lys Ala Tyr Ser Thr Leu Asn Arg Lys Trp His Asp Lys Gly Glu Leu		
385	390	395
Leu Cys His Leu Glu Thr Gln Val Lys Glu Val Lys Glu Lys Phe Glu		
405	410	415
Asn Lys Glu Lys Lys Leu Lys Ala Glu Arg Asp Lys Ser Ile Glu Leu		
420	425	430
Gln Lys Asn Ala Met Glu Lys Leu His Ser Met Asp Asp Ala Phe Lys		
435	440	445
Arg Gln Val Asp Ala Ile Val Glu Ala His Gln Ala Glu Ile Ala Gln		
450	455	460
Leu Ala Asn Glu Lys Gln Lys Cys Ile Asp Ser Ala Asn Leu Lys Val		
465	470	475
His Gln Ile Glu Lys Glu Met Arg Glu Leu Leu Glu Glu Thr Cys Lys		
485	490	495
Asn Lys Lys Thr Met Glu Ala Lys Ile Lys Gln Leu Ala Phe Ala Leu		
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<210> 2917

<211> 2636

<212> DNA

<213> Homo sapiens

<400> 2917

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<212> PRT
<213> Homo sapiens

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 115 120 125
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 130 135 140
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 Thr Gly Val Arg Thr Leu Ala Glu Gln Leu Glu Val Gly Ile Ala Lys
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 His Ile Gln Lys Leu Val Gly Val Arg Glu Ser Val Leu Pro Glu Asp
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Trp Thr His Thr Leu Thr Val Leu Val Glu Ala Ala Ala Ser Gln Arg		240
245	250	255
Ser Ser Ser Leu Ala Ser Asn Arg Leu Lys Ile Ala Leu Gln Asn Leu		
260	265	270
Glu Ile Cys Phe His Ala Glu Gly Cys Gly Leu Pro Pro Lys Ala Leu		
275	280	285
His Thr Ala Thr Phe Gln Ala Leu Gln Arg Asp Leu Glu Leu Gln Ala		
290	295	300
Ala Ser Ser Arg Glu Leu Ile Arg Lys Tyr Phe Cys Ser Arg Ile Gln		
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Gln Gln Ala Glu Thr Thr Ser Glu Glu Leu Gly Ala Val Thr Val Lys		
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Ala Ser Tyr Arg Ala Ser Glu Gln Lys Leu Arg Val Glu Leu Leu Ser		
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Val Gln Leu Thr Leu Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala		
370	375	380
Arg Glu Thr Gln Lys His Lys Lys Asp Leu His Pro Leu Phe Asp Glu		
385	390	395
Thr Phe Glu Phe Leu Val Pro Ala Glu Pro Cys Arg Lys Ala Gly Ala		
405	410	415
Cys Leu Leu Leu Thr Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp		
420	425	430
Leu Glu Gly Glu Ala Phe Leu Pro Leu Arg Glu Val Pro Gly Leu Ser		
435	440	445
Gly Ser Glu Glu Pro Gly Glu Val Pro Gln Thr Arg Leu Pro Leu Thr		
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<211> 455

<212> DNA

<213> Homo sapiens

<400> 2919

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 <213> Homo sapiens

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 Cys Cys Gly Asn Gln Ala Ala Gly Asn Asp Ala Leu Gln Asp Val Leu
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 Ser Leu Leu Asn Asp Leu Ser Arg Ser His Ile Gly Lys Ala Ile Leu
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 Ser Gln Pro Ala Cys Val Ser Lys Leu Leu Ser Leu Leu Leu Asp Gln
 85 90 95
 Arg Pro Ser Pro Lys Leu Val Leu Ile Ile Leu Gln Leu Cys Arg Ala
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Glu Tyr Ile Asp Cys Ile Ser Asn Val Ala His Val Gly His Cys His			
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Gly His Gln Asp Val Val Val Leu Asp His Ala Tyr His Gly His Leu			
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Ser Ser Leu Ile Asp Ile Ser Pro Tyr Lys Phe Arg Asn Leu Asp Gly			
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Gln Lys Glu Trp Val His Val Ala Pro Leu Pro Asp Thr Tyr Arg Gly			
165	170	175	
Pro Tyr Arg Xaa Arg Thr Thr Pro Thr Gln Leu Trp Xaa Tyr Ala Asn			
180	185	190	
Glu Val Lys Arg Val Val Ser Ser Ala Gln Glu Lys Gly Arg Lys Ile			
195	200	205	
Ala Ala Phe Phe Ala Glu Ser Leu Pro Ser Val Gly Gly Gln Ile Ile			
210	215	220	
Pro Pro Ala Gly Tyr Phe Ser Gln Val Ala Glu His Ile Arg Lys Ala			
225	230	235	240
Gly Gly Val Phe Val Ala Asp Glu Ile Gln Val Gly Phe Gly Arg Val			
245	250	255	
Gly Lys His Phe Trp Ala Phe Gln Leu Gln Gly Lys Asp Phe Val Pro			
260	265	270	
Asp Ile Val Thr Met Gly Lys Ser Ile Gly Asn Gly His Pro Val Ala			
275	280	285	
Cys Val Ala Ala Thr Gln Pro Val Ala Arg Ala Phe Glu Ala Thr Gly			
290	295	300	
Val Glu Tyr Phe Asn Thr Phe Gly Gly Ser Pro Val Ser Cys Ala Val			
305	310	315	320
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325	330	335	
Ala Thr Ser Val Gly Ser Phe Leu Met Gln Leu Leu Trp Gln Gln Lys			
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355	360	365	
Gly Val Asp Leu Ile Lys Asp Glu Ala Thr Arg Thr Pro Ala Thr Glu			
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Glu Ala Xaa Val Tyr Leu Val Ser Arg Leu Lys Glu Asn Tyr Val Leu			
385	390	395	400
Leu Ser Thr Asp Gly Pro Gly Arg Asn Ile Leu Lys Phe Lys Pro Pro			
405	410	415	
Met Cys Phe Ser Leu Asp Asn Ala Arg Gln Val Val Ala Lys Leu Asp			
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 50 55 60
 Asn Thr Lys Ser Ala Arg Glu Arg Ala Gly Gln Asp Met Gly Leu Glu
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 His Gly Phe Glu Lys Pro Leu Asp Ser Ala Met Ser Ala Glu Glu Asp
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 Thr Asp Val Arg Gly Arg Arg Lys Lys Lys Thr Pro Arg Lys Ala Glu
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 Asp Thr Arg Glu Asn Arg Lys Leu Glu Asn Lys Asn Ala Phe Leu Glu
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 Ala Ala Glu Leu Glu Lys Leu Met Pro Val Ser Ala Gln Thr Pro Lys
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 165 170 175
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 180 185 190
 Gln Lys Arg His Asp Ser Asp Lys Glu Glu Lys Gly Arg Lys Glu Pro
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 Lys Gly Leu Lys Thr Leu Lys Glu Ile Arg Asn Ala Phe Asp Leu Phe
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 225 230 235 240
 Arg Glu Glu Ile Pro Leu Asp Phe Lys Thr Ile Asp Asp His Lys Thr

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 <213> Homo sapiens

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 35 40 45
 Glu Ala Ile Met Ala Gln Gln Asp Arg Ile Gln Gln Glu Ile Ala Val
 50 55 60
 Gln Asn Pro Leu Val Ser Glu Arg Leu Glu Leu Ser Val Leu Tyr Lys
 65 70 75 80
 Glu Tyr Ala Glu Asp Asp Asn Ile Tyr Gln Gln Lys Ile Lys Asp Leu
 85 90 95
 His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro Asp Gly Asn Cys
 100 105 110
 Phe Tyr Arg Ala Phe Gly Phe Ser His Leu Glu Ala Leu Leu Asp Asp
 115 120 125
 Ser Lys Glu Leu Gln Arg Phe Lys Ala Val Ser Ala Lys Ser Lys Glu
 130 135 140
 Asp Leu Val Ser Gln Gly Phe Thr Glu Phe Thr Ile Glu Asp Phe His
 145 150 155 160
 Asn Thr Phe Met Asp Leu Ile Glu Gln Val Glu Lys Gln Thr Ser Val
 165 170 175
 Ala Asp Leu Leu Ala Ser Phe Asn Asp Gln Ser Thr Ser Asp Tyr Leu
 180 185 190
 Val Val Tyr Leu Arg Leu Leu Thr Ser Gly Tyr Leu Gln Arg Glu Ser
 195 200 205
 Lys Phe Phe Glu His Phe Ile Glu Gly Gly Arg Thr Val Lys Glu Phe
 210 215 220
 Cys Gln Gln Glu Val Glu Pro Met Cys Lys Glu Ser Asp His Ile His
 225 230 235 240
 Ile Ile Ala Leu Ala Gln Ala Leu Ser Val Ser Ile Gln Val Glu Tyr
 245 250 255
 Met Asp Arg Gly Glu Gly Gly Thr Thr Asn Pro His Ile Phe Pro Glu
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<210> 2929
<211> 4920
<212> DNA
<213> Homo sapiens
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420
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1680

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3840
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4440
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4620
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4680
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4740
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4800
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<210> 2930
 <211> 1166
 <212> PRT
 <213> Homo sapiens

<400> 2930
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 35 40 45
 Gln Lys Glu Asn Met Ile Asp Lys Asp Val Glu Leu Ser Val Val Leu
 50 55 60
 Pro Gly Asp Ile Ile Lys Ser Thr Thr Val His Gly Ser Lys Pro Met
 65 70 75 80
 Met Asp Leu Leu Ile Phe Leu Cys Ala Gln Tyr His Leu Asn Pro Ser
 85 90 95
 Ser Tyr Thr Ile Asp Leu Leu Ser Ala Glu Gln Asn His Ile Lys Phe
 100 105 110
 Lys Pro Asn Thr Pro Ile Gly Met Leu Glu Val Glu Lys Val Ile Leu
 115 120 125
 Lys Pro Lys Met Leu Asp Lys Lys Pro Thr Pro Ile Ile Pro Glu
 130 135 140
 Lys Thr Val Arg Val Val Ile Asn Phe Lys Lys Thr Gln Lys Thr Ile
 145 150 155 160
 Val Arg Val Ser Pro His Ala Ser Leu Gln Glu Leu Ala Pro Ile Ile
 165 170 175
 Cys Ser Lys Cys Glu Phe Asp Pro Leu His Thr Leu Leu Leu Lys Asp
 180 185 190
 Tyr Gln Ser Gln Glu Pro Leu Asp Leu Thr Lys Ser Leu Asn Asp Leu
 195 200 205
 Gly Leu Arg Glu Leu Tyr Ala Met Asp Val Asn Arg Glu Ser Cys Gln
 210 215 220
 Ile Ser Gln Asn Leu Asp Ile Met Lys Glu Lys Glu Asn Lys Gly Phe
 225 230 235 240
 Phe Ser Phe Phe Gln Arg Ser Lys Lys Lys Arg Asp Gln Thr Ala Ser
 245 250 255
 Ala Pro Ala Thr Pro Leu Val Asn Lys Arg Pro Thr Phe Thr Arg
 260 265 270
 Ser Asn Thr Ile Ser Lys Pro Tyr Ile Ser Asn Thr Leu Pro Ser Asp
 275 280 285
 Ala Pro Lys Lys Arg Arg Ala Pro Leu Pro Pro Met Pro Ala Ser Gln
 290 295 300
 Ser Val Pro Gln Asp Leu Ala His Ile Gln Glu Arg Pro Ala Ser Cys
 305 310 315 320
 Ile Val Lys Ser Met Ser Val Asp Glu Thr Asp Lys Ser Pro Cys Glu
 325 330 335
 Ala Gly Arg Val Arg Ala Gly Ser Leu Gln Leu Ser Ser Met Ser Ala
 340 345 350
 Gly Asn Ser Ser Leu Arg Arg Thr Lys Arg Lys Ala Pro Ser Pro Pro
 355 360 365
 Ser Lys Ile Pro Pro His Gln Ser Asp Glu Asn Ser Arg Val Thr Ala

370	375	380
Leu Gln Pro Val Asp Gly Val Pro Pro Asp Ser Ala Ser Glu Ala Asn		
385	390	395
Ser Pro Glu Glu Leu Ser Ser Pro Glu Thr Phe His Pro Gly Leu Ser		400
405	410	415
Ser Gln Glu Gln Cys Thr Ala Pro Lys Leu Met Glu Glu Thr Ser Val		
420	425	430
Phe Glu Cys Pro Gly Thr Pro Glu Ala Ala Ile Thr Ser Leu Thr Ser		
435	440	445
Gly Ile Ser Ser Asp Tyr Ser Leu Glu Glu Ile Asp Glu Lys Glu Glu		
450	455	460
Leu Ser Glu Val Pro Lys Val Glu Ala Glu Asn Ile Ser Pro Lys Ser		
465	470	475
Gln Asp Ile Pro Phe Val Ser Thr Asp Ile Ile Asn Thr Leu Lys Asn		480
485	490	495
Asp Pro Asp Ser Ala Leu Gly Asn Gly Ser Gly Glu Phe Ser Gln Asn		
500	505	510
Ser Met Glu Glu Lys Gln Glu Thr Lys Ser Thr Asp Gly Gln Glu Pro		
515	520	525
His Ser Val Val Tyr Asp Thr Ser Asn Gly Lys Lys Val Val Asp Ser		
530	535	540
Ile Arg Asn Leu Lys Ser Leu Gly Pro Asn Gln Glu Asn Val Gln Asn		
545	550	555
Glu Ile Ile Val Tyr Pro Glu Asn Thr Glu Asp Asn Met Lys Asn Gly		
565	570	575
Val Lys Lys Thr Glu Ile Asn Val Glu Gly Val Ala Lys Asn Asn Asn		
580	585	590
Ile Asp Met Glu Val Glu Arg Pro Ser Asn Ser Glu Ala His Glu Thr		
595	600	605
Asp Thr Ala Ile Ser Tyr Lys Glu Asn His Leu Ala Ala Ser Ser Val		
610	615	620
Pro Asp Gln Lys Leu Asn Gln Pro Ser Ala Glu Lys Thr Lys Asp Ala		
625	630	635
Ala Ile Gln Thr Thr Pro Ser Cys Asn Ser Phe Asp Gly Lys His Gln		
645	650	655
Asp His Asn Leu Ser Asp Ser Lys Val Glu Glu Cys Val Gln Thr Ser		
660	665	670
Asn Asn Asn Ile Ser Thr Gln His Ser Cys Leu Ser Ser Gln Asp Ser		
675	680	685
Val Asn Thr Ser Arg Glu Phe Arg Ser Gln Gly Thr Leu Ile Ile His		
690	695	700
Ser Glu Asp Pro Leu Thr Val Lys Asp Pro Ile Cys Ala His Gly Asn		
705	710	715
Asp Asp Leu Leu Pro Pro Val Asp Arg Ile Asp Lys Asn Ser Thr Ala		
725	730	735
Ser Tyr Leu Lys Asn Tyr Pro Leu Tyr Arg Gln Asp Tyr Asn Pro Lys		
740	745	750
Pro Lys Pro Ser Asn Glu Ile Thr Arg Glu Tyr Ile Pro Lys Ile Gly		
755	760	765
Met Thr Thr Tyr Lys Ile Val Pro Pro Lys Ser Leu Glu Ile Ser Lys		
770	775	780
Asp Trp Gln Ser Glu Thr Ile Glu Tyr Lys Asp Asp Gln Asp Met His		
785	790	795
Ala Leu Gly Lys Lys His Thr His Glu Asn Val Lys Glu Thr Ala Ile		800

805	810	815
Gln Thr Glu Asp Ser Ala Ile Ser Glu Ser Pro Glu Glu Pro Leu Pro		
820	825	830
Asn Leu Lys Pro Lys Pro Asn Leu Arg Thr Glu His Gln Val Pro Ser		
835	840	845
Ser Val Ser Ser Pro Asp Asp Ala Met Val Ser Pro Leu Lys Pro Ala		
850	855	860
Pro Lys Met Thr Arg Asp Thr Gly Thr Ala Pro Phe Ala Pro Asn Leu		
865	870	875
Glu Glu Ile Asn Asn Ile Leu Glu Ser Lys Phe Lys Ser Arg Ala Ser		
885	890	895
Asn Ala Gln Ala Lys Pro Ser Ser Phe Phe Leu Gln Met Gln Lys Arg		
900	905	910
Val Ser Gly His Tyr Val Thr Ser Ala Ala Ala Lys Ser Val His Ala		
915	920	925
Ala Pro Asn Pro Ala Pro Lys Glu Leu Thr Asn Lys Glu Ala Glu Arg		
930	935	940
Asp Met Leu Pro Ser Pro Glu Gln Thr Leu Ser Pro Leu Ser Lys Met		
945	950	955
Pro His Ser Val Pro Gln Pro Leu Val Glu Lys Thr Asp Asp Asp Val		
965	970	975
Ile Gly Gln Ala Pro Ala Glu Ala Ser Pro Pro Pro Ile Ala Pro Lys		
980	985	990
Pro Val Thr Ile Pro Ala Ser Gln Val Ser Thr Gln Asn Leu Lys Thr		
995	1000	1005
Leu Lys Thr Phe Gly Ala Pro Arg Pro Tyr Ser Ser Ser Gly Pro Ser		
1010	1015	1020
Pro Phe Ala Leu Ala Val Val Lys Arg Ser Gln Ser Phe Ser Lys Glu		
1025	1030	1035
Arg Thr Glu Ser Pro Ser Ala Ser Ala Leu Val Gln Pro Pro Ala Asn		
1045	1050	1055
Thr Glu Glu Gly Lys Thr His Ser Val Asn Lys Phe Val Asp Ile Pro		
1060	1065	1070
Gln Leu Gly Val Ser Asp Lys Glu Asn Asn Ser Ala His Asn Glu Gln		
1075	1080	1085
Asn Ser Gln Ile Pro Thr Pro Thr Asp Gly Pro Ser Phe Thr Val Met		
1090	1095	1100
Arg Gln Ser Ser Leu Thr Phe Gln Ser Ser Asp Pro Glu Gln Met Arg		
1105	1110	1115
Gln Ser Leu Leu Thr Ala Ile Arg Ser Gly Glu Ala Ala Ala Lys Leu		
1125	1130	1135
Lys Arg Val Thr Ile Pro Ser Asn Thr Ile Ser Val Asn Gly Arg Ser		
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Arg Leu Ser His Ser Met Ser Pro Asp Ala Gln Asp Gly His		
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<210> 2931

<211> 625

<212> DNA

<213> Homo sapiens

<400> 2931

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180
gtgttttag gttcactctg atgagttgcc atgaaatcaa accaatotaa actgtcatct
240
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360
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420
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480
aagcagcagt ctctgctgat aaaccagact cagtaactgac tcatacatgtc cccaggaacc
540
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cacagtgcac agtcccttca cgccgt
625

<210> 2932
<211> 90
<212> PRT
<213> *Homo sapiens*

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      20          25                  30
Asn Lys Lys Lys Arg Leu Ala Leu Asp Ser Glu Ala Ala Val Ser Ala
      35          40                  45
Asp Lys Pro Asp Ser Val Leu Thr His His Val Pro Arg Asn Leu Gln
      50          55                  60
Lys Leu Cys Lys Glu Arg Ala Gln Lys Leu Cys Arg Asn Ser Thr Arg
      65          70                  75                 80
Val Pro Ala Gln Cys Thr Val Pro Ser Arg
      85          90

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<212> DNA  
<213> Homo sapiens
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120
cgagaaagtc aagaaaacgac tagagaactt ctgaaagtta aagacagatt aattgaagta
180
gaaagaaaata atgctacact gcaagcagag aagcaagcgt tggaaaactca actgaagcaa
240

cttgagacac agaacaataa tttgcaggct cagattcttg cacttcagag gcagacagt
 300
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 360
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 420
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 480
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 688

<210> 2934
 <211> 229
 <212> PRT
 <213> Homo sapiens

<400> 2934

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								20		25				30	
Ser	Gly	Glu	Asp	Asn	Lys	Trp	Glu	Arg	Glu	Ser	Gln	Glu	Thr	Thr	Arg
								35		40				45	
Glu	Leu	Leu	Lys	Val	Lys	Asp	Arg	Leu	Ile	Glu	Val	Glu	Arg	Asn	Asn
					50				55			60			
Ala	Thr	Leu	Gln	Ala	Glu	Lys	Gln	Ala	Leu	Lys	Thr	Gln	Leu	Lys	Gln
								65		70		75		80	
Leu	Glu	Thr	Gln	Asn	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln
								85		90		95			
Arg	Gln	Thr	Val	Ser	Leu	Gln	Glu	Gln	Asn	Thr	Thr	Leu	Gln	Thr	Gln
								100		105		110			
Asn	Ala	Lys	Leu	Gln	Val	Glu	Asn	Ser	Thr	Leu	Asn	Ser	Gln	Ser	Thr
								115		120		125			
Ser	Leu	Met	Asn	Gln	Asn	Ala	Gln	Leu	Ile	Gln	Gln	Ser	Ser	Leu	
								130		135		140			
Glu	Asn	Glu	Asn	Glu	Ser	Val	Ile	Lys	Glu	Arg	Glu	Asp	Leu	Lys	Ser
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Leu	Tyr	Asp	Ser	Leu	Ile	Lys	Asp	His	Glu	Lys	Leu	Glu	Leu	Leu	His
								165		170		175			
Glu	Arg	Gln	Ala	Ser	Glu	Tyr	Glu	Ser	Leu	Ile	Ser	Lys	His	Gly	Thr
								180		185		190			
Leu	Lys	Ser	Ala	His	Lys	Asn	Leu	Glu	Val	Glu	His	Arg	Asp	Leu	Glu
								195		200		205			
Asp	Arg	Tyr	Asn	Gln	Leu	Leu	Lys	Gln	Lys	Gly	Gln	Leu	Glu	Asp	Leu
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Glu	Lys	Met	Leu	Lys											
								225							

<210> 2935
<211> 1200
<212> DNA
<213> Homo sapiens

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120
aactctaaaa gataaaagcaa gaaatgtcaa gttaggtttt cacattggc tgctttaggc
180
tgtgcctctt gattcttctg gtgtactcat gataactctcc ctgggtgccc tccaggctga
240
cgcagctatt tacgttcaga gtgaaatggg ctgtgtggct gggattggga aaggccttgc
300
taaagctggg agagggtttgg tcatggtgac aggggacctg aaggcccagc tcctttcccc
360
tcttgccaat acagggacaa gttaaagaag aagaagaaag taaaggtaaa gatggaaaag
420
aaatccacgc cctcttagggg ctcatcatcc aagtcgtctt caaggcagct aagcgagagc
480
ttcaagagca aagagtttgc gtctagtgat gagagctt cgggagagaa caagagcaaa
540
aagaagagga ggaggagcga ggactctgaa gaagaagaac tagccagttac tccccccagc
600
tcagaggact cagcgtcagg atccgatgag tagaaacgga ggaagggtctt ctggcgctt
660
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<210> 2936
<211> 109
<212> PRT
<213> Homo sapiens

<400> 2936
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		Leu	Lys
		Lys	Lys
			Lys
20		25	30
Val	Lys	Val	Lys
		Met	Glu
		Lys	Lys
		Ser	Thr
		Pro	Ser
		Arg	Gly
		Ser	Ser
35		40	45
Ser	Lys	Ser	Ser
		Arg	Gln
		Lys	Leu
		Ser	Glu
		Phe	Lys
		Ser	Ser
		Glu	Gly
		Ser	Asn
		Lys	Lys
50		55	60
Phe	Val	Ser	Ser
		Asp	Glu
		Ser	Ser
		Gly	Glu
		Asn	Lys
65		70	75
Lys	Arg	Arg	Arg
		Ser	Glu
		Asp	Ser
		Glu	Glu
		Glu	Glu
		Leu	Ala
		Ser	Thr
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Pro	Pro	Ser	Ser
		Glu	Gly
		Asp	Ser
		Ser	Asp
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<210> 2937

<211> 749

<212> DNA

<213> Homo sapiens

<400> 2937

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<210> 2938

<211> 249

<212> PRT

<213> Homo sapiens

<400> 2938

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		Lys	Lys
		Leu	Thr
			Cys
			Arg
			Val
		Lys	Ile
			Lys
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Glu	Ala	Thr	Gly
			Leu
		Pro	Leu
		Asn	Leu
		Ser	Asn
			Phe
			Val
			Phe
			Cys
35		40	45
Tyr	Thr	Phe	Trp
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			Ala
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		Pro	Pro
		Ser	Gln
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			Thr
65		70	75
Thr	Phe	Ser	His
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		Lys	Asp
			Tyr
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			Thr
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		Gly	Gly
		Ala	Leu
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			Glu
			Val
			Trp
			Gly
			His
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			Gly
		Ser	Ser
		Ile	Trp
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		Leu	His
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			Arg
			Trp
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Ile	Glu	Met	Trp
			Ile
		Ser	Leu
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			Leu
145		150	155
Ala	Ala	Val	Glu
			Leu
		His	His
			Gln
			Ala
		Lys	Asp
			Val
			Asn
		Thr	Gly
165		170	175
Phe	Gln	Leu	Arg
			Gln
			Gly
			His
		Ser	Ser
		Arg	Arg
180		185	190
Pro	Val	Gln	His
			Ser
		Gly	Gly
		Thr	Thr
		Leu	Leu
195		200	205
Ser	Val	Ser	Ile
			Gly
		Cys	Val
			Thr
		Ala	Arg
210		215	220
Gly	Leu	Asp	Ser
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		Gln	Arg
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<210> 2939

<211> 2405

<212> DNA

<213> Homo sapiens

<400> 2939

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2100

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<210> 2940
 <211> 357
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Pro Ala Ile Leu Thr Tyr His Asp Val Gly Leu Asn Tyr Lys Ser Cys
 50 55 60
 Phe Gln Pro Leu Phe Gln Phe Glu Asp Met Gln Glu Ile Ile Gln Asn
 65 70 80
 Phe Val Arg Val His Val Asp Ala Pro Gly Met Glu Glu Gly Ala Pro
 85 90 95
 Val Phe Pro Leu Gly Tyr Gln Tyr Pro Ser Leu Asp Gln Leu Ala Asp
 100 105 110
 Met Ile Pro Cys Val Leu Gln Tyr Leu Asn Phe Ser Thr Ile Ile Gly
 115 120 125
 Val Gly Val Gly Ala Gly Ala Tyr Ile Leu Ala Arg Tyr Ala Leu Asn
 130 135 140
 His Pro Asp Thr Val Glu Gly Leu Val Leu Ile Asn Ile Asp Pro Asn
 145 150 160
 Ala Lys Gly Trp Met Asp Trp Ala Ala His Lys Leu Thr Gly Leu Thr
 165 170 175
 Ser Ser Ile Pro Glu Met Ile Leu Gly His Leu Phe Ser Gln Glu Glu
 180 185 190
 Leu Ser Gly Asn Ser Glu Leu Ile Gln Lys Tyr Arg Asn Ile Ile Thr
 195 200 205
 His Ala Pro Asn Leu Asp Asn Ile Glu Leu Tyr Trp Asn Ser Tyr Asn
 210 215 220
 Asn Arg Arg Asp Leu Asn Phe Glu Arg Gly Gly Asp Ile Thr Leu Arg
 225 230 240
 Cys Pro Val Met Leu Val Val Gly Asp Gln Ala Pro His Glu Asp Ala
 245 250 255
 Val Val Glu Cys Asn Ser Lys Leu Asp Pro Thr Gln Thr Ser Phe Leu
 260 265 270
 Lys Met Ala Asp Ser Gly Gly Gln Pro Gln Leu Thr Gln Pro Gly Lys

275	280	285
Leu Thr Glu Ala Phe Lys Tyr Phe Leu Gln Gly Met	Gly Tyr Met Ala	
290	295	300
Ser Ser Cys Met Thr Arg Leu Ser Arg Ser Arg	Thr Ala Ser Leu Thr	
305	310	315
Ser Ala Ala Ser Val Asp Gly Asn Arg Ser Arg Ser	Arg Thr Leu Ser	320
325	330	335
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<210> 2941
<211> 847
<212> DNA
<213> Homo sapiens

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<210> 2942
<211> 229
<212> PRT
<213> Homo sapiens

<400> 2942

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 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln
 35 40 45
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro
 50 55 60
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr
 65 70 75 80
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu
 85 90 95
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro
 100 105 110
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys
 115 120 125
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala
 130 135 140
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln
 145 150 155 160
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp
 165 170 175
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys
 180 185 190
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala
 195 200 205
 Gln Val Val Tyr Phe Leu Gly Ile Ala Glu Ser Leu Leu Gly Leu Leu
 210 215 220
 Gln Asp Pro Gln Ala
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<210> 2943

<211> 1501
<212> DNA
<213> Homo sapiens

<400> 2943

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<211> 218

<212> PRT

<213> Homo sapiens

<400> 2944

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							20		25			30			
Lys	Lys	Ile	Ser	Arg	Leu	Asp	Ala	Glu	Leu	Val	Lys	Tyr	Lys	Asp	Gln
							35		40			45			
Ile	Lys	Lys	Met	Arg	Glu	Gly	Pro	Ala	Lys	Asn	Met	Val	Lys	Gln	Lys
							50		55			60			
Ala	Leu	Arg	Val	Leu	Lys	Gln	Lys	Arg	Met	Tyr	Glu	Gln	Gln	Arg	Asp
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Asn	Leu	Ala	Asn	Ser	His	Ser	Thr	Trp	Asn	Ala	Asn	Tyr	Thr	Ile	Gln

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Lys Glu Met Lys Lys Ala Tyr Lys Gln Val Lys Ile Asp Gln Ile Glu		
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Asp Leu Gln Asp Gln Leu Glu Asp Met Met Glu Asp Ala Asn Glu Ile		
130	135	140
Gln Glu Ala Leu Ser Arg Ser Tyr Gly Thr Pro Glu Leu Asp Glu Asp		
145	150	155
Asp Leu Glu Ala Glu Leu Asp Ala Leu Gly Asp Glu Leu Leu Ala Asp		
165	170	175
Glu Asp Ser Ser Tyr Leu Asp Glu Ala Ala Ser Ala Pro Ala Ile Pro		
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<210> 2945

<211> 3331

<212> DNA

<213> Homo sapiens

<400> 2945

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 <211> 463
 <212> PRT
 <213> Homo sapiens

<400> 2946
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 Val Pro Ser Asp Gln Asp Ala His Gln Tyr Leu Arg Leu Arg Asp Gln
 50 55 60
 Ser Glu Ala Thr Gln Val Met Ala Glu Pro Gly Glu Gly Ser Glu
 65 70 75 80
 Thr Val Ala Leu Pro Pro Pro Pro Ser Glu Glu Gly Gly Val Pro
 85 90 95
 Gln Asp Ala Ala Gly Arg Gly Gly Thr Pro Gln Ile Arg Val Val Gly
 100 105 110
 Gly Arg Gly His Val Ala Ile Lys Ala Gly Gln Glu Glu Gly Gln Pro
 115 120 125
 Pro Ala Glu Gly Leu Ala Ala Ala Ser Val Val Met Ala Ala Asp Arg
 130 135 140
 Ser Leu Lys Lys Gly Val Gln Gly Gly Glu Lys Ala Leu Glu Ile Cys

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Ala Glu Glu Val Lys Thr Gly Lys Cys Ala Thr Val Ser Ala Ala Val			
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Ala Glu Arg Glu Ser Ala Glu Val Val Val Lys Glu Gly Leu Ala Glu			
195	200	205	
Lys Glu Val Met Glu Glu Gln Met Glu Val Glu Glu Gln Pro Pro Glu			
210	215	220	
Gly Glu Glu Ile Glu Val Ala Glu Glu Asp Arg Leu Glu Glu Ala			
225	230	235	240
Arg Glu Glu Glu Gly Pro Trp Pro Leu His Glu Ala Leu Arg Met Asp			
245	250	255	
Pro Leu Glu Ala Ile Gln Leu Glu Leu Asp Thr Val Asn Ala Gln Ala			
260	265	270	
Asp Arg Ala Phe Gln Gln Leu Glu His Lys Phe Gly Arg Met Arg Arg			
275	280	285	
His Tyr Leu Glu Arg Arg Asn Tyr Ile Ile Gln Asn Ile Pro Gly Phe			
290	295	300	
Trp Met Thr Ala Phe Arg Asn His Pro Gln Leu Ser Ala Met Ile Arg			
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Gly Gln Asp Ala Glu Met Leu Arg Tyr Ile Thr Asn Leu Glu Val Lys			
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Glu Leu Arg His Pro Arg Thr Gly Cys Lys Phe Lys Phe Phe Arg			
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Arg Asn Pro Tyr Phe Arg Asn Lys Leu Ile Val Lys Glu Tyr Glu Val			
355	360	365	
Arg Ser Ser Gly Arg Val Val Ser Leu Ser Thr Pro Ile Ile Trp Arg			
370	375	380	
Arg Gly His Glu Pro Gln Ser Phe Ile Arg Arg Asn Gln Asp Leu Ile			
385	390	395	400
Cys Ser Phe Phe Thr Trp Phe Ser Asp His Ser Leu Pro Glu Ser Asp			
405	410	415	
Lys Ile Ala Glu Ile Ile Lys Glu Asp Leu Trp Pro Asn Pro Leu Gln			
420	425	430	
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<211> 997

<212> DNA

<213> Homo sapiens

<400> 2947

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240

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<211> 332

<212> PRT

<213> Homo sapiens

<400> 2948

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Ser	Asp	Ile	Arg	Ala	Gly	Thr	Ala	Pro	Ser	Cys	Arg	Asn	His	Ile	Lys	
									35					40	45	
Ser	Ser	Cys	Ser	Leu	Ile	Ala	Phe	Asn	Ser	Asp	Arg	Pro	Gly	Val	Leu	
									50					55	60	
Gly	Ile	Val	Pro	Leu	Gln	Gly	Gln	Gly	Glu	Asp	Lys	Arg	Arg	Val	Ala	
									65					70	75	80
His	Leu	Gly	Cys	His	Ser	Asp	Leu	Val	Thr	Asp	Leu	Asp	Phe	Ser	Pro	
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Phe	Asp	Asp	Phe	Leu	Leu	Ala	Thr	Gly	Ser	Ala	Asp	Arg	Thr	Val	Lys	
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Leu	Trp	Arg	Leu	Pro	Gly	Pro	Gly	Gln	Ala	Leu	Pro	Ser	Ala	Pro	Gly	
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Val	Val	Leu	Gly	Pro	Glu	Asp	Leu	Pro	Val	Glu	Val	Leu	Gln	Phe	His	
									130					135	140	
Pro	Thr	Ser	Asp	Gly	Ile	Leu	Val	Ser	Ala	Ala	Gly	Thr	Thr	Val	Lys	
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Val	Trp	Asp	Ala	Ala	Lys	Gln	Gln	Pro	Leu	Thr	Glu	Leu	Ala	Ala	His	

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Gly Asp Leu Val Gln Ser Ala Val Trp Ser Arg Asp Gly Ala Leu Val		
180	185	190
Gly Thr Ala Cys Lys Asp Lys Gln Leu Gln Ile Phe Asp Pro Arg Thr		
195	200	205
Lys Pro Arg Ala Ser Gln Ser Thr Gln Ala His Glu Asn Ser Arg Asp		
210	215	220
Ser Arg Leu Ala Trp Met Gly Thr Trp Glu His Leu Val Ser Thr Gly		
225	230	235
Phe Asn Gln Met Arg Glu Arg Glu Val Lys Leu Trp Asp Thr Arg Phe		
245	250	255
Phe Ser Ser Ala Leu Ala Ser Leu Thr Leu Asp Thr Ser Leu Gly Cys		
260	265	270
Leu Val Pro Leu Leu Asp Pro Asp Ser Gly Leu Leu Val Leu Ala Gly		
275	280	285
Lys Gly Glu Arg Gln Leu Tyr Cys Tyr Glu Val Val Pro Gln Gln Pro		
290	295	300
Ala Leu Ser Pro Val Thr Gln Cys Val Leu Glu Ser Val Leu Arg Gly		
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<211> 880

<212> DNA

<213> Homo sapiens

<400> 2949

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<210> 2950

<211> 279

<212> PRT

<213> Homo sapiens

<400> 2950

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Lys Gly Lys Arg Pro Asn Leu Lys Val His Ile Asn Thr Thr Ser Asp
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Ser Ile Leu Leu Lys Phe Leu Arg Pro Ser Pro Asn Val Lys Leu Glu
50 55 60

Gly Leu Leu Leu Gly Tyr Gly Ser Asn Val Ser Pro Asn Gln Tyr Phe
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Pro Leu Pro Ala Glu Gly Lys Phe Thr Glu Ala Ile Val Asp Ala Glu
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Pro Lys Tyr Leu Ile Val Val Arg Pro Ala Pro Pro Ser Gln Lys
100 105 110

Lys Ser Cys Ser Gly Lys Thr Arg Ser Arg Lys Pro Leu Gln Leu Val
115 120 125

Val Gly Thr Leu Thr Pro Ser Ser Val Phe Leu Ser Trp Gly Phe Leu
130 135 140

Ile Asn Pro His His Asp Trp Thr Leu Pro Ser His Cys Pro Asn Asp
145 150 155 160

Arg Phe Tyr Thr Ile Arg Tyr Arg Glu Lys Asp Lys Glu Lys Lys Trp
165 170 175

Ile Phe Gln Ile Cys Pro Ala Pro Glu Thr Ile Val Glu Asn Leu Lys
180 185 190

Pro Asn Thr Val Tyr Glu Phe Gly Val Lys Asp Asn Val Glu Gly Gly
195 200 205

Ile Trp Ser Lys Ile Phe Asn His Lys Thr Val Val Gly Ser Lys Lys
210 215 220

Val Asn Gly Lys Ile Gln Ser Thr Tyr Asp Gln Asp His Thr Val Pro
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Ala Tyr Val Pro Arg Lys Leu Ile Pro Ile Thr Ile Ile Lys Gln Val
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<210> 2951

<211> 3478

<212> DNA

<213> Homo sapiens

<400> 2951

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<211> 493
<212> PRT
<213> Homo sapiens

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 195 200 205
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 210 215 220
 Tyr Gln Pro Pro Thr Tyr Asn Arg Ile Ile Asn Gln Ile Ser Thr Asn
 225 230 235 240
 Glu Ile Gln Ser Asp Gln Asn Leu Lys Val Leu Pro Pro Pro Leu Pro
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 260 265 270
 Gly Pro Trp Arg Asp Cys Leu Gln Ala Leu Glu Asp Gly His Asp Thr
 275 280 285
 Ser Ser Ile Tyr Leu Val Lys Pro Glu Asn Thr Asn Arg Leu Met Gln
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 Val Trp Cys Asp Gln Arg His Asp Pro Gly Gly Trp Thr Val Ile Gln

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Lys Gln Gly Phe Gly Asn Ile Asp Gly Glu Tyr Trp Leu Gly Leu Glu			
340	345	350	
Asn Ile Tyr Trp Leu Thr Asn Gln Gly Asn Tyr Lys Leu Leu Val Thr			
355	360	365	
Met Glu Asp Trp Ser Gly Arg Lys Val Phe Ala Glu Tyr Ala Ser Phe			
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His Gly Asn Ala Gly Asp Ser Phe Thr Trp His Asn Gly Lys Gln Phe			
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Thr Thr Leu Asp Arg Asp His Asp Val Tyr Thr Gly Asn Cys Ala His			
420	425	430	
Tyr Gln Lys Gly Gly Trp Trp Tyr Asn Ala Cys Ala His Ser Asn Leu			
435	440	445	
Asn Gly Val Trp Tyr Arg Gly Gly His Tyr Arg Ser Arg Tyr Gln Asp			
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Gly Val Tyr Trp Ala Glu Phe Arg Gly Ser Tyr Ser Leu Lys Lys			
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<211> 1377
<212> DNA
<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 2954
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 Tyr Ala Ser Ile Lys Ala Ile Glu Ser Pro Ser Lys Asp Asp Asp Thr
 65 70 75 80
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 His Gly Ala Val Asp Arg Ile Met Asn Asp Leu Ser Gly Arg Ala Leu
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<213> Homo sapiens

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<210> 2956

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<212> PRT

<213> Homo sapiens

<400> 2956

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Ile	Asn	Ser	Tyr	Phe	Pro	Ile	Ser	His	Tyr	Lys	Gly	His	Thr	Val	Leu
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Pro	Leu	Pro	Leu	Ser	Ser	Lys	Ile	Ala	Ser	Pro	Pro	Phe	Ser	Leu	Ile
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<212> DNA

<213> Homo sapiens

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 35 40 45
 Ser Thr Ala Leu Gln Thr Trp Leu Phe Gly Tyr Glu Leu Thr Asp Thr
 50 55 60
 Ile Met Val Phe Cys Asp Asp Lys Ile Ile Phe Met Ala Ser Lys Lys

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Ala Asn Gly Ala Pro Ala Ile Thr Leu Leu Ile Arg Glu Lys Asn Glu			
100	105		110
Ser Asn Lys Ser Ser Phe Asp Lys Met Ile Glu Ala Ile Lys Glu Ser			
115	120	125	
Lys Asn Gly Lys Lys Ile Gly Val Phe Ser Lys Asp Lys Phe Pro Gly			
130	135	140	
Glu Phe Met Lys Ser Trp Asn Asp Cys Leu Asn Lys Glu Gly Phe Asp			
145	150	155	160
Lys Ile Asp Ile Ser Ala Val Val Ala Tyr Thr Ile Ala Val Lys Glu			
165	170	175	
Asp Gly Glu Leu Asn Leu Met Lys Lys Ala Ala Ser Ile Thr Ser Glu			
180	185	190	
Val Phe Asn Lys Phe Phe Lys Glu Arg Val Met Glu Ile Val Asp Ala			
195	200	205	
Asp Glu Lys Val Arg His Ser Lys Leu Ala Glu Ser Val Glu Lys Ala			
210	215	220	
Ile Glu Glu Lys Lys Tyr Leu Ala Gly Ala Asp Pro Ser Thr Val Glu			
225	230	235	240
Met Cys Tyr Pro Pro Ile Ile Gln Ser Gly Gly Asn Tyr Asn Leu Lys			
245	250	255	
Phe Ser Val Val Ser Asp Lys Asn His Met His Phe Gly Ala Ile Thr			
260	265	270	
Cys Ala Met Gly Ile Arg Phe Lys Ser Tyr Cys Ser Asn Leu Val Arg			
275	280	285	
Thr Leu Met Val Asp Pro Ser Gln Glu Val Gln Glu Asn Tyr Asn Phe			
290	295	300	
Leu Leu Gln Leu Gln Glu Glu Leu Leu Lys Glu Leu Arg His Gly Val			
305	310	315	320
Lys Ile Cys Asp Val Tyr Asn Ala Val Met Asp Val Val Lys Lys Gln			
325	330	335	
Lys Pro Glu Leu Leu Asn Lys Ile Thr Lys Asn Leu Gly Phe Gly Met			
340	345	350	
Gly Ile Glu Phe Arg Glu Gly Ser Leu Val Ile Asn Ser Lys Asn Gln			
355	360	365	
Tyr Lys Leu Lys Lys Gly Met Val Phe Ser Ile Asn Leu Gly Phe Ser			
370	375	380	
Asp Leu Thr Asn Lys Glu Gly Lys Lys Pro Glu Glu Lys Thr Tyr Ala			
385	390	395	400
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405	410	415	
Val Leu Thr Ser Val Lys Lys Val Lys Asn Val Gly Ile Phe Leu			
420	425	430	
Lys Asn Glu Asp Glu Glu Glu Glu Glu Lys Asp Glu Ala Glu			
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Asp Leu Leu Gly Arg Gly Ser Arg Ala Ala Leu Leu Thr Glu Arg Thr			
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Arg Asn Glu Met Thr Ala Glu Glu Lys Arg Arg Ala His Gln Lys Glu			
465	470	475	480
Leu Ala Ala Gln Leu Asn Glu Glu Ala Lys Arg Arg Leu Thr Glu Gln			
485	490	495	
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Val Glu Gly Asp Tyr Thr Tyr Leu Arg Ile Asn Phe Tyr Cys Pro Gly			
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Ser Ala Leu Gly Arg Asn Glu Gly Asn Ile Phe Pro Asn Pro Glu Ala			
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Thr Phe Val Lys Glu Ile Thr Tyr Arg Ala Ser Asn Ile Lys Ala Pro			
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Gly Glu Gln Thr Val Pro Ala Leu Asn Leu Gln Asn Ala Phe Arg Ile			
610	615	620	
Ile Lys Glu Val Gln Lys Arg Tyr Lys Thr Arg Glu Ala Glu Glu Lys			
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Glu Lys Glu Gly Ile Val Lys Gln Asp Ser Leu Val Ile Asn Leu Asn			
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Arg Ser Asn Pro Lys Leu Lys Asp Leu Tyr Ile Arg Pro Asn Ile Ala			
660	665	670	
Gln Lys Arg Met Gln Gly Ser Leu Glu Ala His Val Asn Gly Phe Arg			
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Phe Thr Ser Val Arg Gly Asp Lys Val Asp Ile Leu Tyr Asn Asn Ile			
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Asp Val Gln Phe Tyr Thr Glu Val Gly Glu Ile Thr Thr Asp Leu Gly			
740	745	750	
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805	810	815	
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820	825	830	
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Gln Phe His Leu Lys Asn Phe Asp Met Val Ile Val Tyr Lys Asp Tyr			
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Ser Lys Lys Val Thr Met Ile Asn Ala Ile Pro Val Ala Ser Leu Asp			
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Pro Ile Lys Glu Trp Leu Asn Ser Cys Asp Leu Lys Tyr Thr Glu Gly			
885	890	895	
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Pro Glu Gly Phe Phe Glu Gln Gly Gly Trp Ser Phe Leu Glu Pro Glu			
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Lys Glu Ser Leu Gly Ser Glu Glu Glu Ser Gly Lys Asp Trp Asp Glu		
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Leu Glu Glu Ala Arg Lys Ala Asp Arg Glu Ser Arg Tyr Glu Glu		
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Glu Glu Glu Gln Ser Arg Ser Met Ser Arg Lys Arg Lys Ala Ser Val		
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<211> 3323

<212> DNA

<213> Homo sapiens

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<210> 2960
 <211> 868
 <212> PRT
 <213> Homo sapiens

<400> 2960
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 35 40 45
 Leu Arg Arg Ala Ala Val Gly Arg Pro Leu Asp Lys His Glu Gly Ala
 50 55 60
 Leu Glu Thr Leu Leu Arg Tyr Tyr Asp Gln Ile Cys Ser Ile Glu Pro
 65 70 75 80
 Lys Phe Pro Phe Ser Glu Asn Gln Ile Cys Leu Thr Phe Thr Trp Lys
 85 90 95
 Asp Ala Phe Asp Lys Gly Ser Leu Phe Gly Gly Ser Val Lys Leu Ala
 100 105 110
 Leu Ala Ser Leu Gly Tyr Glu Lys Ser Cys Val Leu Phe Asn Cys Ala
 115 120 125
 Ala Leu Ala Ser Gln Ile Ala Ala Glu Gln Asn Leu Asp Asn Asp Glu
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 Gly Leu Lys Ile Ala Ala Lys His Tyr Gln Phe Ala Ser Gly Ala Phe
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 Leu His Ile Lys Glu Thr Val Leu Ser Ala Leu Ser Arg Glu Pro Thr

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Val Asp Ile Ser Pro Asp Thr Val Gly Thr Leu Ser Leu Ile Met Leu			
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Ala Gln Ala Gln Glu Val Phe Phe Leu Lys Ala Thr Arg Asp Lys Met			
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Lys Asp Ala Ile Ile Ala Lys Leu Ala Asn Gln Ala Ala Asp Tyr Phe			
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Gly Asp Ala Phe Lys Gln Cys Gln Tyr Lys Asp Thr Leu Pro Lys Glu			
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Val Phe Pro Val Leu Ala Ala Lys His Cys Ile Met Gln Ala Asn Ala			
245	250	255	
Glu Tyr His Gln Ser Ile Leu Ala Lys Gln Gln Lys Lys Phe Gly Glu			
260	265	270	
Glu Ile Ala Arg Leu Gln His Ala Ala Glu Leu Ile Lys Thr Val Ala			
275	280	285	
Ser Arg Tyr Asp Glu Tyr Val Asn Val Lys Asp Phe Ser Asp Lys Ile			
290	295	300	
Asn Arg Ala Leu Ala Ala Lys Lys Asp Asn Asp Phe Ile Tyr His			
305	310	315	320
Asp Arg Val Pro Asp Leu Lys Asp Leu Asp Pro Ile Gly Lys Ala Thr			
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Leu Val Lys Ser Thr Pro Val Asn Val Pro Ile Ser Gln Lys Phe Thr			
340	345	350	
Asp Leu Phe Glu Lys Met Val Pro Val Ser Val Gln Gln Ser Leu Ala			
355	360	365	
Ala Tyr Asn Gln Arg Lys Ala Asp Leu Val Asn Arg Ser Ile Ala Gln			
370	375	380	
Met Arg Glu Ala Thr Thr Leu Ala Asn Gly Val Leu Ala Ser Leu Asn			
385	390	395	400
Leu Pro Ala Ala Ile Glu Asp Val Ser Gly Asp Thr Val Pro Gln Ser			
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Val Asp Gln Leu Ile Lys Glu Leu Pro Glu Leu Leu Gln Arg Asn Arg			
435	440	445	
Glu Ile Leu Glu Glu Ser Leu Arg Leu Leu Asp Glu Glu Glu Ala Thr			
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465	470	475	480
Ser Asn Asp Leu Tyr Lys Pro Leu Arg Ala Glu Gly Thr Asn Phe Arg			
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Thr Val Leu Asp Lys Ala Val Gln Ala Asp Gly Gln Val Lys Glu Cys			
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Tyr Gln Ser His Arg Asp Thr Ile Val Leu Leu Cys Lys Pro Glu Pro			
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Glu Leu Asn Ala Ala Ile Pro Ser Ala Asn Pro Ala Lys Thr Met Gln			
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Gly Ser Glu Val Val Asn Val Leu Lys Ser Leu Leu Ser Asn Leu Asp			
545	550	555	560
Glu Val Lys Lys Glu Arg Glu Gly Leu Glu Asn Asp Leu Lys Ser Val			
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Asn Phe Asp Met Thr Ser Lys Phe Leu Thr Ala Leu Ala Gln Asp Gly			
580	585	590	
Val Ile Asn Glu Glu Ala Leu Ser Val Thr Glu Leu Asp Arg Val Tyr			

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Leu	Thr	Thr
Lys	Val	Gln
	Glu	Ser
	Leu	Lys
		Gln
		Glu
		Gly
610	615	620
Leu	Leu	Lys
Lys	Asn	Ile
	Gln	Val
	Val	Ser
	His	Gln
		Glu
		Phe
		Ser
		Lys
625	630	635
Gln	Ser	Asn
Asn	Asn	Glu
	Ala	Asn
	Leu	Arg
	Glu	Glu
		Val
		Leu
		Lys
		Asn
		Leu
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Tyr	Asp	Asn
	Phe	Val
	Glu	Leu
		Val
		Ala
		Asn
		Leu
		Lys
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Phe	Tyr	Asn
	Glu	Leu
	Thr	Glu
	Ile	Leu
	Val	Arg
		Phe
675	680	685
Asn	Lys	Cys
Ser	Asp	Ile
	Val	Phe
		Ala
		Arg
		Lys
		Thr
		Glu
		Arg
690	695	700
Leu	Leu	Lys
Asp	Leu	Gln
	Gln	Ser
	Ile	Ala
		Arg
		Glu
		Pro
705	710	715
Ser	Ile	Pro
Pro	Thr	Pro
	Ala	Tyr
	Gln	Ser
	Leu	Pro
	Ala	Gly
		Gly
725	730	735
Pro	Thr	Pro
	Thr	Pro
	Ala	Pro
	Arg	Thr
		Met
		Pro
		Pro
740	745	750
Gln	Pro	Pro
	Ala	Arg
	Pro	Pro
	Pro	Pro
	Val	Leu
	Pro	Ala
	Asn	Arg
755	760	765
Pro	Ser	Ala
Ala	Thr	Ala
	Pro	Pro
	Val	Gly
		Ala
		Gly
770	775	780
Ala	Pro	Ser
Gln	Thr	Pro
	Gly	Ser
	Ala	Pro
	Pro	Pro
	Gln	Ala
		Gln
785	790	795
Pro	Pro	Tyr
	Tyr	Tyr
	Pro	Gly
	Tyr	Pro
	Gly	Tyr
		Cys
		Gln
		Met
		Pro
805	810	815
Met	Pro	Met
Gly	Tyr	Asn
	Pro	Tyr
	Ala	Tyr
	Gly	Gln
		Tyr
820	825	830
Tyr	Pro	Pro
	Val	Tyr
	His	Gln
	Ser	Pro
	Gly	Gln
		Ala
835	840	845
Pro	Gln	Gln
Pro	Pro	Ser
	Tyr	Pro
	Phe	Pro
	Gln	Pro
	Pro	Pro
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<210> 2961

<211> 434

<212> DNA

<213> Homo sapiens

<400> 2961

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240
catgttgacc agtgtgtctca agtcctgggg ctcaagtaat ccgccccact cggtctccca
300
aagtgtgggg attacaggca tgagccacgg tgccctggcca gatTTTgttt ggctatgcca
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<210> 2962
 <211> 92
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala
 50 55 60
 Arg Val Glu Ala Asn Phe Cys Ile Phe Phe Val Glu Thr Gly Phe Arg
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 85 90

<210> 2963
 <211> 567
 <212> DNA
 <213> Homo sapiens

<400> 2963
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<210> 2964
 <211> 115
 <212> PRT

<213> Homo sapiens

<400> 2964
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 35 40 45
 Gly Gly Pro Gly Arg Val Trp Gly Thr Ser Leu His Val Val Gly Leu
 50 55 60
 Leu Met Val His Glu Trp Val Val Lys Gly Ala Val Trp Ala Gly
 65 70 75 80
 Pro Leu Pro Gln Ala Trp Pro Pro Asp Thr Pro Phe Pro Ala Asp Val
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 Pro Ala Gly
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<210> 2965

<211> 3739

<212> DNA

<213> Homo sapiens

<400> 2965
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<210> 2966
 <211> 386
 <212> PRT
 <213> Homo sapiens

<400> 2966
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Glu	Asn	Ala	Lys	Asn	Phe	Pro	Gln	Cys	Val	Leu	Glu	Ile	Ser	Asp	Gln
		50				55					60				
Glu	Val	Leu	Glu	Trp	Tyr	Thr	Ala	Lys	Asp	Phe	Ile	Val	Gly	Lys	Ser
		65				70				75			80		
Leu	Thr	Ile	Leu	Gly	Arg	Thr	Phe	Phe	Ile	Tyr	Asp	Cys	Asp	Pro	Phe
		85					90					95			
Thr	Arg	Arg	Tyr	Tyr	Lys	Glu	Lys	Phe	Gly	Ile	Thr	Asp	Leu	Pro	Arg
		100					105					110			
Ile	Asp	Val	Ser	Lys	Arg	Glu	Pro	Pro	Pro	Val	Lys	Gln	Glu	Leu	Pro
		115				120					125				
Pro	Tyr	Asn	Gly	Phe	Gly	Leu	Val	Glu	Asp	Ser	Ala	Gln	Asn	Cys	Phe
							130				135		140		
Ala	Leu	Ile	Pro	Lys	Ala	Pro	Lys	Lys	Asp	Val	Ile	Lys	Met	Leu	Val
							145				150		155		160
Asn	Asp	Asn	Lys	Val	Leu	Arg	Tyr	Leu	Ala	Val	Leu	Glu	Ser	Pro	Ile
							165				170		175		
Pro	Glu	Asp	Lys	Asp	Arg	Arg	Phe	Val	Phe	Ser	Tyr	Phe	Leu	Ala	Thr
							180			185		190			
Asp	Met	Ile	Ser	Ile	Phe	Glu	Pro	Pro	Val	Arg	Asn	Ser	Gly	Ile	Ile
							195			200		205			
Gly	Gly	Lys	Tyr	Leu	Gly	Arg	Thr	Lys	Val	Val	Lys	Pro	Tyr	Ser	Thr
							210			215		220			
Val	Asp	Asn	Pro	Val	Tyr	Tyr	Gly	Pro	Ser	Asp	Phe	Phe	Ile	Gly	Ala
							225			230		235		240	
Val	Ile	Glu	Val	Phe	Gly	His	Arg	Phe	Ile	Ile	Leu	Asp	Thr	Asp	Glu
							245			250		255			
Tyr	Val	Leu	Lys	Tyr	Met	Glu	Ser	Asn	Ala	Ala	Gln	Tyr	Ser	Pro	Glu
							260			265		270			
Ala	Leu	Ala	Ser	Ile	Gln	Asn	His	Val	Arg	Lys	Arg	Glu	Ala	Pro	Ala
							275			280		285			
Pro	Glu	Ala	Glu	Ser	Lys	Gln	Thr	Glu	Lys	Asp	Pro	Gly	Val	Gln	Glu
							290			295		300			
Leu	Glu	Ala	Leu	Ile	Asp	Thr	Ile	Gln	Lys	Gln	Leu	Lys	Asp	His	Ser
							305			310		315		320	
Cys	Lys	Asp	Asn	Ile	Arg	Glu	Ala	Phe	Gln	Ile	Tyr	Asp	Lys	Glu	Ala
							325			330		335			
Ser	Gly	Tyr	Val	Asp	Arg	Asp	Met	Phe	Phe	Lys	Ile	Cys	Glu	Ser	Leu
							340			345		350			
Asn	Val	Pro	Val	Asp	Asp	Ser	Leu	Val	Lys	Glu	Leu	Leu	Arg	Met	Cys
							355			360		365			
Ser	His	Gly	Glu	Gly	Lys	Ile	Asn	Tyr	Tyr	Asn	Phe	Val	Arg	Ala	Phe
							370			375		380			
Ser	Asn														
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<210> 2967

<211> 1103

<212> DNA

<213> Homo sapiens

<400> 2967

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 180
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 240
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 420
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 600
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 1080
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 1103

<210> 2968
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 2968
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 Trp Glu Asp Lys Asp Glu Phe Leu Asp Val Ile Tyr Trp Phe Arg Gln
 35 40 45
 Ile Ile Ala Val Val Leu Gly Val Ile Trp Gly Val Leu Pro Leu Arg
 50 55 60
 Gly Phe Leu Gly Ile Ala Gly Phe Cys Leu Ile Asn Ala Gly Val Leu

65	70	75	80												
Tyr	Leu	Tyr	Phe	Ser	Asn	Tyr	Leu	Gln	Ile	Asp	Glu	Glu	Glu	Tyr	Gly
		85					90							95	
Gly	Thr	Trp	Glu	Leu	Thr	Lys	Glu	Gly	Phe	Met	Thr	Ser	Phe	Ala	Xaa
				100			105							110	
Val	His	Gly	His	Leu	Asp	His	Leu	Leu	His	Cys	His	Pro	Leu		
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<210> 2969

<211> 667

<212> DNA

<213> Homo sapiens

<400> 2969

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300
cgagtatag gagaggatgg cgctgagggc tatagtgate tggccgaga gaatgccatg
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667

<210> 2970

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2970

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				20			25						30		
Ser	Gln	Thr	Ile	Met	Ile	Ala	Trp	Gly	Ser	Pro	Ser	Asn	Arg	Asp	Phe
				35			40						45		
Met	Glu	Thr	Leu	Asn	Thr	Leu	Lys	Tyr	Ala	Asn	Arg	Ala	Arg	Asn	Ile
				50			55						60		
Lys	Asn	Lys	Val	Val	Val	Asn	Gln	Asp	Lys	Thr	Ala	Ser	Lys	Ser	Met

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<210> 2971
<211> 6015
<212> DNA
<213> Homo sapiens

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<211> 632
<212> PRT

<213> Homo sapiens

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 Phe Pro Glu Ser Ala Ile Arg Asn Ile Met Tyr Gln Ile Leu Gln Gly
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 Gln His Gln Ala Ser Gln Pro Pro Leu His Leu Thr Tyr Pro Tyr Lys
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465	470	475
Leu Arg Ser Ala Ala Lys Gln His Tyr Leu Lys His Ser Arg Tyr Leu		
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Pro Gly Ile Ser Ile Arg Asn Gly Ile Leu Ser Asn Pro Gly Lys Glu		
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Ser Thr Ser Ser Ser Gly Leu Thr Gly Asn Tyr Val Pro Ser Phe Leu		
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Lys Lys Glu Ile Gly Ser Ala Met Gln Arg Val His Leu Ala Pro Ile		
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<211> 858

<212> DNA

<213> Homo sapiens

<400> 2973

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<212> PRT

<213> Homo sapiens

<400> 2974

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<211> 1425

<212> DNA

<213> Homo sapiens

<400> 2975

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<210> 2976

<211> 328

<212> PRT

<213> Homo sapiens

<400> 2976

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<210> 2977

<211> 1420

<212> DNA

<213> Homo sapiens

<400> 2977

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<210> 2978
 <211> 369
 <212> PRT
 <213> Homo sapiens

<400> 2978
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 Ala His Val Asp Val Gln Thr Leu Ser Ser Gln Leu Ala Val Thr Val
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 Gly Pro Gly Glu Arg Arg Ile Gly Pro Gly Glu Pro Leu Glu Leu Leu
 65 70 75 80
 Cys Asn Val Ser Gly Ala Leu Pro Pro Ala Gly Arg His Ala Ala Tyr
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 Ser Val Gly Trp Glu Met Ala Pro Ala Gly Ala Pro Gly Pro Gly Arg
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 Leu Val Ala Gln Leu Asp Thr Glu Gly Val Gly Ser Leu Xaa Ala Leu

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Tyr Arg Leu Arg Leu Glu Ala Ala Arg Pro Gly Asp Ala Gly Thr Tyr		
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Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly Thr Arg Leu Arg		160
165	170	175
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu		
180	185	190
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val		
195	200	205
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly		
210	215	220
Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro		
225	230	235
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val		240
245	250	255
Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Pro		
260	265	270
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His		
275	280	285
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala		
290	295	300
Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg		
305	310	315
Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu		320
325	330	335
Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala		
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<211> 2191
<212> DNA
<213> Homo sapiens

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1980
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2040

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2100
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2191

<210> 2980

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2980

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Gly Thr Glu His Gly Gln Pro Phe Ala Arg Gly Trp Gly Ala Trp Gly
      35          40          45
Asn Ala Arg Arg Ala Arg Val Gly Arg Ala Glu Cys Leu Leu Ser Gly
      50          55          60
Arg Pro Pro Thr Ala Val Leu Pro Arg Leu Val Glu Asn Leu Lys Ala
      65          70          75          80
Arg Val Pro Val Pro Gly His Thr Glu Pro Leu Trp Ser Glu Gly Thr
      85          90          95
Ala Pro Gly Gln Gly Leu Trp Ser His Ala Pro Ala Asp Gly Ser Leu
      100         105         110
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Ser Met Cys Phe Gly Asp Gly Ala Gly Ala Ala Cys
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<210> 2981

<211> 617

<212> DNA

<213> Homo sapiens

<400> 2981

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480

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<210> 2982
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 <212> PRT
 <213> Homo sapiens

<400> 2982
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 His Ser Ser Ser Ser Glu Glu Ser Thr Lys Arg Thr Ser His Ser Lys
 35 40 45
 Leu Pro Glu Gln Glu Ala Ala Glu Ala Asp Leu Ser Asn Met Glu Arg
 50 55 60
 Val Ser Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu Leu
 65 70 75 80
 Ser Thr Ser Ala Leu Ser Glu Ala Ala Ser Asp Thr Thr Gln Glu Pro
 85 90 95
 Pro Gly Ser His Glu Tyr Ala Ala Leu Lys Val
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<210> 2983
 <211> 614
 <212> DNA
 <213> Homo sapiens

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<212> PRT
<213> Homo sapiens

<400> 2984
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35 40 45
Lys Arg Phe Ile Gly Asp Tyr Glu Pro Asn Thr Gly Lys Leu Tyr Ser
50 55 60
Arg Leu Val Tyr Val Glu Gly Asp Gln Leu Ser Leu Gln Ile Gln Asp
65 70 75 80
Thr Pro Gly Gly Val Gln Ile Gln Asp Ser Leu Pro Gln Val Val Asp
85 90 95
Ser Leu Gln Met Arg Ala Val Ala Glu Gly Phe Leu Leu Val Tyr Ser
100 105 110
Ile Thr Asp Tyr Asp Ser Tyr Leu Ser Ile Arg Pro Leu Tyr Gln His
115 120 125
Ile Arg Lys Val His Pro Asp Ser Lys Ala Pro Val Ile Ile Val Gly
130 135 140
Asn Lys Gly Asp Leu Leu His Ala Arg Gln Val Gln Thr Gln Asp Gly
145 150 155 160
Ile Gln Leu Ala Asn Glu Leu Gly Ser Leu Phe Leu Glu Ile Ser Thr
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<210> 2985
<211> 4547
<212> DNA
<213> Homo sapiens

<400> 2985
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<210> 2986
 <211> 988
 <212> PRT
 <213> Homo sapiens

<400> 2986
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 Glu Leu Cys Val Lys Leu Met Phe Leu His Pro Val Asp Tyr Gly Arg
 35 40 45
 Lys Ala Glu Glu Leu Leu Trp Arg Lys Val Tyr Tyr Glu Val Ile Gln
 50 55 60
 Leu Ile Lys Thr Asn Lys Lys His Ile His Ser Arg Ser Thr Leu Glu
 65 70 75 80
 Cys Ala Tyr Arg Thr His Leu Val Ala Gly Ile Gly Phe Tyr Gln His
 85 90 95
 Leu Leu Leu Tyr Ile Gln Ser His Tyr Gln Leu Glu Leu Gln Cys Cys
 100 105 110
 Ile Asp Trp Thr His Val Thr Asp Pro Leu Ile Gly Cys Lys Lys Pro

115	120	125
Val Ser Ala Ser Gly Lys Glu Met Asp Trp Ala Gln Met Ala Cys His		
130	135	140
Arg Cys Leu Val Tyr Leu Gly Asp Leu Ser Arg Tyr Gln Asn Glu Leu		
145	150	155
Ala Gly Val Asp Thr Glu Leu Leu Ala Glu Arg Phe Tyr Tyr Gln Ala		
165	170	175
Leu Ser Val Ala Pro Gln Ile Gly Met Pro Phe Asn Gln Leu Gly Thr		
180	185	190
Leu Ala Gly Ser Lys Tyr Tyr Asn Val Glu Ala Met Tyr Cys Tyr Leu		
195	200	205
Arg Cys Ile Gln Ser Glu Val Ser Phe Glu Gly Ala Tyr Gly Asn Leu		
210	215	220
Lys Arg Leu Tyr Asp Lys Ala Ala Lys Met Tyr His Gln Leu Lys Lys		
225	230	235
Cys Glu Thr Arg Lys Leu Ser Pro Gly Lys Lys Arg Cys Lys Asp Ile		
245	250	255
Lys Arg Leu Leu Val Asn Phe Met Tyr Leu Gln Ser Leu Leu Gln Pro		
260	265	270
Lys Ser Ser Ser Val Asp Ser Glu Leu Thr Ser Leu Cys Gln Ser Val		
275	280	285
Leu Glu Asp Phe Asn Leu Cys Leu Phe Tyr Leu Pro Ser Ser Pro Asn		
290	295	300
Leu Ser Leu Ala Ser Glu Asp Glu Glu Tyr Glu Ser Gly Tyr Ala		
305	310	315
Phe Leu Pro Asp Leu Leu Ile Phe Gln Met Val Ile Ile Cys Leu Met		
325	330	335
Cys Val His Ser Leu Glu Arg Ala Gly Ser Lys Gln Tyr Ser Ala Ala		
340	345	350
Ile Ala Phe Thr Leu Ala Leu Phe Ser His Leu Val Asn His Val Asn		
355	360	365
Ile Arg Leu Gln Ala Glu Leu Glu Glu Gly Glu Asn Pro Val Pro Ala		
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Phe Gln Ser Asp Gly Thr Asp Glu Pro Glu Ser Lys Glu Pro Val Glu		
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Lys Glu Glu Pro Asp Pro Glu Pro Pro Pro Val Thr Pro Gln Val		
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450	455	460
Ser Asp Ser Gly Ser Asp Lys Ser Leu Glu Gly Gly Gly Thr Ala Phe		
465	470	475
Asp Ala Glu Thr Asp Ser Glu Met Asn Ser Gln Glu Ser Arg Ser Asp		
485	490	495
Leu Glu Asp Met Glu Glu Glu Gly Thr Arg Ser Pro Thr Leu Glu		
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Pro Pro Arg Gly Arg Ser Glu Ala Pro Asp Ser Leu Asn Gly Pro Leu		
515	520	525
Gly Pro Ser Glu Ala Ser Ile Ala Ser Asn Leu Gln Ala Met Ser Thr		
530	535	540
Gln Met Phe Gln Thr Lys Arg Cys Phe Arg Leu Ala Pro Thr Phe Ser		

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Gln	Pro	Thr	Thr
Asn	Pro	His	Thr
Asn	Pro	Ser	Ala
Asn	His	Ser	Ser
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Arg	Pro	Cys	Val
Asn	Gly	Asp	Val
Asp	Val	Lys	Pro
Asp	Ser	Glu	Pro
Asp	Ser	Glu	Ala
Asp	Ser	Gly	Ser
Asp	Ser	Gly	Cys
580	585	590	
Glu	Glu	Gly	Ser
Glu	Glu	Gly	Ser
Glu	Glu	Gly	Ser
Glu	Glu	Gly	Ser
595	600	605	
Arg	Asn	Glu	Arg
Asn	Glu	Arg	Ser
Ile	Gln	Glu	Lys
Glu	Leu	Gln	Val
Leu	Met	Val	Leu
Glu	Ala	Glu	Glu
610	615	620	
Gly	Leu	Leu	Pro
Pro	Ala	Val	Lys
Asp	Trp	Leu	Arg
Asp	Trp	Leu	Thr
Asn	Asn	Asn	Asn
625	630	635	640
Pro	Asp	Leu	Ile
Ile	Ile	Val	Cys
Cys	Ala	Gln	Ser
Ser	Ser	Gln	Ser
Gln	Ser	Leu	Trp
Asn	Asn	Asn	Asn
645	650	655	
Arg	Leu	Ser	Val
Leu	Leu	Asn	Leu
Leu	Pro	Ala	Ala
Gly	Glu	Gly	Glu
660	665	670	
Glu	Ser	Gly	Leu
Leu	Ala	Leu	Cys
Pro	Glu	Val	Gln
Asp	Leu	Glu	Gly
675	680	685	
Cys	Glu	Leu	Pro
Leu	Pro	Asp	Leu
Asp	Ser	Ser	Leu
Leu	Leu	Leu	Pro
Glu	Asp	Glu	Asp
690	695	700	
Ala	Leu	Arg	Asn
Leu	Pro	Pro	Leu
Pro	Leu	Arg	Ala
Leu	Ala	His	Arg
Arg	Arg	Phe	Asn
705	710	715	720
Phe	Asp	Thr	Asp
Asp	Arg	Pro	Leu
Leu	Leu	Ser	Thr
Leu	Glu	Glu	Ser
725	730	735	
Arg	Ile	Cys	Cys
Ile	Arg	Ser	Phe
Gly	His	Phe	Ile
Ile	Ala	Arg	Leu
Gln	740	745	750
Gly	Ser	Ile	Gln
Ile	Leu	Phe	Asn
Asn	Pro	Glu	Val
Gly	Ile	Phe	Gly
Ile	755	760	765
Ala	Gln	Ser	Glu
Gln	Gln	Glu	Ser
Leu	Leu	Leu	Gln
Gln	770	775	780
Arg	Met	Ala	Gln
Gln	Glu	Glu	Ala
Ala	Arg	Arg	Arg
Arg	Asn	Arg	Leu
785	790	795	800
Ala	Gln	Leu	Arg
Gln	Leu	Gln	Leu
Leu	Glu	Val	Ser
Gln	805	810	815
Gln	Gln	Pro	Lys
Ala	Gln	Ser	Ala
Gln	Ser	Ala	Met
Asp	Met	Ser	Pro
Met	Ser	Tyr	Leu
820	825	830	
Thr	Gln	Ala	Cys
Gly	His	His	Leu
Leu	Pro	Val	Ile
Ile	Arg	Gln	Leu
835	840	845	
Ser	Gly	Arg	Phe
Ile	Val	Ile	Ile
Ile	Pro	Arg	Thr
Arg	Thr	Val	Ile
850	855	860	
Asp	Leu	Leu	Lys
Lys	Glu	His	Pro
Gly	Ala	Arg	Gly
Ile	Arg	Asp	Ile
865	870	875	880
Leu	Glu	Ala	Glu
Phe	Lys	Lys	Gly
Lys	Gly	Asn	Arg
Arg	Tyr	Ile	Arg
885	890	895	
Glu	Val	Gly	Lys
Gly	Lys	Ser	Phe
Phe	Glu	Arg	His
Gly	Lys	Lys	Leu
Ile	Arg	Gly	Asp
900	905	910	
Asp	Ala	Trp	Thr
Leu	Tyr	Lys	Ile
Ile	Leu	Asp	Ser
Asp	Ser	Cys	Lys
Cys	Lys	Gln	Leu
915	920	925	
Leu	Ala	Gln	Gly
Gly	Ala	Glu	Glu
Glu	Glu	Asp	Pro
Asp	Pro	Ser	Gly
930	935	940	
Ile	Thr	Gly	Leu
Leu	Pro	Leu	Asp
Asp	Asn	Pro	Ser
Asn	Pro	Ser	Val
945	950	955	960
Gln	Ala	Ala	Leu
Ala	Ala	Gln	Ala
Ala	Ala	His	Ala
His	Ala	Ser	Val
Ala	Asp	Ile	Lys
965	970	975	
Val	Leu	Asp	Phe
Phe	Tyr	Lys	Gln
Gly	Gly	Trp	Lys
Ile	Ile	Gly	

980

985

<210> 2987
 <211> 1016
 <212> DNA
 <213> Homo sapiens

<400> 2987
 ngtcgacaag gtgggaaggtaaccgatggatggggggggagggtgtgggt gctcacggcc
 60 acatcaataaa ggctcaataac attccttggggacagggaaaga agaaaattcaa ctagtttctt
 120 gaaaggcggt cctgaaattc acaggggaga gcggatattc caggaggcag tctaagttat
 180 ctgaggcgtg caactcaccc agtgagacca agttactgtatgttccacgc atcacgtccc
 240 agtacaggc tcctctgagcg tcatccaggt cctgccactc ctcccagggtg aagtgcacag
 300 ctaccccttc aaaggacacc aactcctgtatgataccag gctgtttagt gtctccagca
 360 tcacgttcct gtacagggtc ctctaagcat catccacgtc ctgccactct tcccagggtga
 420 agtgcacagc cacatcttca aaggacacca accccagaga tttattccctt tctttagtgc
 480 gggccggctt ggggcttggttctatgtccc tgccggtcgg tgcgaggcg aagaggaacc
 540 cgtggggcccg ggggatccccggggccggacca ggttcc ccagttgtgg gagcagacgc
 600 gtgggcgcacat cacggggcggg cagggtgaa gtgcagctat gttccagtg tcctctgggt
 660 gtttccaaga gcaacaggaa acgaataaat ctctgatggatgttccactct gtcacccagg
 720 ctggagtgca gtggcacgtatccgcac tgcaagctcc acctcccagg ttcacaccat
 780 ctcctgcct cagccctcccg agttgcaggactacaggca cccgccacaa tgccggcta
 840 ttttttgtt ttttagtaga gatggggttt cactatgtta gccaggatgg tcttgatctc
 900 ctgacctcat tactcgccng actccggctc ccaaagtgtt ggaattacna gcgtgagaca
 960 cccgcctgg tctccatcaa atgactttt aaataaaata cggttctcac ctaaca
 1016

<210> 2988
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2988
 Trp Ser Leu Thr Leu Ser Pro Arg Leu Glu Cys Ser Gly Thr Ile Ser
 1 5 10 15
 Ala His Cys Lys Leu His Leu Pro Gly Ser His His Pro Pro Ala Ser
 20 25 30
 Ala Ser Arg Val Ala Gly Thr Thr Gly Thr Arg His Asn Ala Arg Leu

35	40	45													
Phe	Phe	Val	Phe	Leu	Val	Glu	Met	Gly	Phe	His	Tyr	Val	Ser	Gln	Asp
50						55					60				
Gly	Leu	Asp	Leu	Leu	Thr	Ser	Leu	Leu	Ala	Xaa	Leu	Arg	Leu	Pro	Lys
65						70				75			80		
Cys	Trp	Asn	Tyr	Xaa	Arg	Glu	Thr	Pro	Arg	Leu	Val	Ser	Ile	Lys	
														95	
85															

<210> 2989

<211> 1185

<212> DNA

<213> Homo sapiens

<400> 2989

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 tcggtgcgag ggcgaagagg aaccgcgtggg cccggggat cccggggggc cggaccagtg
 120
 ttccccagtt gtgggagcag acgcgtggc gcacgcggg cgggcaggc ctgaagtgc
 180
 gctatgttgc cagtgttctc tggctgttgc caagagctac aagaaaagaa taaatctctg
 240
 gagttggtgt ccttgagga ggtagctgtg cacttcacct gggaggagtg gcaggacctg
 300
 gatgacgctc agaggacct gtacagggac gtgatgctgg agacctacag cagcctggta
 360
 tcattggggc attgcattac caaacctgag atgatcttca agctagagca aggagcagag
 420
 ccatggatag tagaagaaac cctaaacctg agactttcag gtggaagcaa gaagcaagtt
 480
 ttctcaggtt tttgccacag gagcctggtg gagctccagg aggtttgatc tctcttgtga
 540
 actctggAAC tgtattccca attgtcaatt ggacatccc acgtatgggaa cctcagatat
 600
 ttcaaacatg atgtgtccaa gtctgtatca cttctggcca tcatattgtt cttttatTTT
 660
 tccaaatttc acatcaccag taacaaacta gctgtgatca tggcagatag cctgaaata
 720
 aaactccccct ttttaccctt tgcacagcaa attgacatca aatcctgttt ctacttttt
 780
 ttttttaact attgcttccc tattctgtat tctcactgct ccatctccctg atgtaggagg
 840
 tcacatgtttt tcctcttttc ctctcctctg actcttaagc ccttcccat tctctttctc
 900
 aggaatggct gttaaaatgc caatatggtc ttgtaacttt cctgtactta gtgaacctcc
 960
 ttatTTACAC cctgtttgtg aagtggctgt gttcacccctg ggtggacacag gaatTTTT
 1020
 ggcatgtaca aagagaattt tatgctgcct gtgtacagtt attaatttgt aagtacactc
 1080
 agcttttgtt atctgttaggt ttaatatctg tgtatgtaaAG caaacttggA tgcaaaatAT
 1140
 ttgaaataaaa atcagatgct tgcacatgttA gtgaacataAA aaaaa
 1185

<210> 2990
<211> 114
<212> PRT
<213> Homo sapiens

<400> 2990
Met Phe Pro Val Phe Ser Gly Cys Phe Gln Glu Leu Gln Glu Lys Asn
1 5 10 15
Lys Ser Leu Glu Leu Val Ser Phe Glu Glu Val Ala Val His Phe Thr
20 25 30
Trp Glu Glu Trp Gln Asp Leu Asp Asp Ala Gln Arg Thr Leu Tyr Arg
35 40 45
Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys
50 55 60
Ile Thr Lys Pro Glu Met Ile Phe Lys Leu Glu Gln Gly Ala Glu Pro
65 70 75 80
Trp Ile Val Glu Glu Thr Leu Asn Leu Arg Leu Ser Gly Gly Ser Lys
85 90 95
Lys Gln Val Phe Ser Gly Ile Cys His Arg Ser Leu Val Glu Leu Gln
100 105 110
Glu Val

<210> 2991
<211> 980
<212> DNA
<213> Homo sapiens

<400> 2991
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atctagaata taaagggttgc tggtcctgat cccttgcaga gtgagtgcag cagtgacagc
120
ttgggtggct ccagctgacc cctccagagc ccctgagtg ggccggctcg cagtcctcag
180
tcagcagcag cagacgtcac ccgtcataca gggccattca ctgaagtgtc acctggcgc
240
cttgggttggc cagtcctctg ctgggactg ctgctggag gcctgggcgc cgcgacttc
300
gcctctgcag tctcgggaca ctcccttgcg tctttacaag cagcatctt agaggttagac
360
agtttccctt cctcaactttt gaagaccgca gtctctgtct tggcatctac agtgaggctg
420
agcgtttctt tcacgccccc attcatcaact gtctcagttt cttgtctgt actttctgca
480
tccttccttc cgtcagagct ggcttccatg gccacactgc ctggccgttc tggctgcact
540
ggcaggccag ccgcactggg agtcagaggg tccatgggtt cagtgctggt ttccatttcc
600
actggagaat tactccttaa agaatctttt gtgcttcactt agggaaagagt gaactctgaa
660
aaagaagccc agcccgctc tttagttggc atcggcttctt ctgtgctcca gacatcagat
720

cccacagaat ccaatggagc accgtgggtt gtttccattg ggacatcaa
780
cagttgggtg gttcaactcag gtccacctcc atttatcct ccgtgttggc actgctgggt
840
tcaaacaagt ctgcgttgc tccatcttct tcttcagagt ctgtacttgc ctcactgtct
900
gtactccccg agctggatcg tctttggat tctggtgtga atgcgatgtg ctttcctcc
960
catatatctt cctcatcaga
980

<210> 2992

<211> 64

<212> PRT

<213> Homo sapiens

<400> 2992

Val Val Ala Val Cys Ser Pro Gln Ser Ala Ala Ala Asp Val Thr Arg
1 5 10 15
His Thr Gly Pro Phe Thr Glu Val Ser Pro Gly Ala Leu Gly Trp Pro
20 25 30
Val Leu Cys Ser Gly Leu Leu Leu Gly Gly Leu Gly Ala Ala His Phe
35 40 45
Ala Ser Ala Val Ser Gly His Ser Ser Ala Ser Leu Gln Ala Ala Ser
50 55 60

<210> 2993

<211> 687

<212> DNA

<213> Homo sapiens

<400> 2993

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120
cgataacctca agttgacat cgagattgga cgtggctct tcaagacggt gtatcgaggg
180
ctagacacccg acaccacagt ggaggtggcc tgggtgtgagc tgtagactcg gaaactgtct
240
agagctgagc ggcagcgctt ctcagaggag gtggagatgc tcaaggggct gcagcacccc
300
aacatgtcc gcttctatga ttctgtggaa tcggtgctga ggggccaggt ttgcattgt
360
ctggtcacccg aactcatgac ctcgggcacg ctcaagacgt acctgaggcg gttccggag
420
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480
cactccccggg ttccctccat cctgcaccgg gatctcaagt gcgacaatgt ctatcactcg
540
ggacctactg gctctgtcaa aatcggggac ctgggcctgg ccacgctcaa gcgccctcc
600
tttgccaaga gtgtcatcg gaccccgaa ttcatggccc ccgagatgtc cgaggaaaag
660

tacgatgagg ccgtggacgt gtacgcg
687

<210> 2994
<211> 229
<212> PRT
<213> Homo sapiens

<400> 2994
Xaa Cys Pro Arg Ser Arg Glu Pro Leu Met Val Thr Glu Ala Val Ala
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Leu Glu Arg Arg Arg Glu Gln Glu Glu Lys Glu Asp Met Glu Thr Gln
20 25 30
Ala Val Ala Thr Ser Pro Asp Gly Arg Tyr Leu Lys Phe Asp Ile Glu
35 40 45
Ile Gly Arg Gly Ser Phe Lys Thr Val Tyr Arg Gly Leu Asp Thr Asp
50 55 60
Thr Thr Val Glu Val Ala Trp Cys Glu Leu Gln Thr Arg Lys Leu Ser
65 70 75 80
Arg Ala Glu Arg Gln Arg Phe Ser Glu Glu Val Glu Met Leu Lys Gly
85 90 95
Leu Gln His Pro Asn Ile Val Arg Phe Tyr Asp Ser Trp Lys Ser Val
100 105 110
Leu Arg Gly Gln Val Cys Ile Val Leu Val Thr Glu Leu Met Thr Ser
115 120 125
Gly Thr Leu Lys Thr Tyr Leu Arg Arg Phe Arg Glu Met Lys Pro Arg
130 135 140
Val Leu Gln Arg Trp Ser Arg Gln Ile Leu Arg Gly Leu His Phe Leu
145 150 155 160
His Ser Arg Val Pro Pro Ile Leu His Arg Asp Leu Lys Cys Asp Asn
165 170 175
Val Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Ile Gly Asp Leu Gly
180 185 190
Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile Gly Thr
195 200 205
Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp Glu Ala
210 215 220
Val Asp Val Tyr Ala
225

<210> 2995
<211> 1879
<212> DNA
<213> Homo sapiens

<400> 2995
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taataaaaatt aagcagtcaa aagaagtgc aaaaacaaga tagtcattca tatatacaga
120
acatatagat tcattttctag ttgattcaat cctatttatg tatttaaat acaaaaataat
180
ggccatctgg ctagttccaa cggttagagca tgagactctt aaaatacataaa atacatctta
240

atgtgtcaag aagaccacag ttagcaccag gaaaggaact ttactttac ttctgattac
300
tttttattt ttatTTTAC ttattattta ttattattat ttttgagatg gagtctcaCT
360
ctgntcaccc aggctggaat acagtgggt gatctcaGt cactgcaacc tccacccc
420
aggTTcaAGC gatttcctg cctcagcTC ctgagtagct gggactctGA tagatgcctg
480
ccaccacacc cggtgattt ttgtatttt agtagagacg gggTTcgCC atgtgctca
540
ggctggTctc gaactcccga cctcaagtGA cttgctcacc ttggcctccc aaagtgcTgg
600
gattacaggt gtgagccact gcacccagCC tggcagtcaA ttttaAGCCT cctattccc
660
aggTTTtagc ttaataatcc tcattAGTT ttcAGATTT tgtcAGTCTT gTTTggggc
720
tatTTTgcCT tagtgggcct aaacagaata ttaaaaataca ttaataatcc atactgagag
780
tagagtataa atgggttct cactccttag ggacacgagt ggaaacaata catccatga
840
acacaggtga atgtccctgg ttatccctga gctggcagt ttcacacaat catttttct
900
ctgaggccaa agtctgtggT ttgatcatct tagcagctc cagaacagaa agtaggttta
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1020
ccacgaaaac tcccccaagg atgaagcTT ctcTTccag gttccagag aagcctccgt
1080
tccaggctcg gaagaagttg taccacactc ccagacggat aaatcccata aacatcatct
1140
tccgcTTTg tggaccatag aacttttct tttcatccag gaagatttct ctttgaaat
1200
aaggctggaa atccttcaCT tcAGTcCTGA tGTGCTCCTT taccactgca tagaggggga
1260
cggccagctg gtccaacatg ctttcaggg aggacagatC cgCAGCTTCC tctcgacaga
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1380
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1500
aggcagcagc ccccagggt cctgcaccaa tggaccacat ccccatggtg aagaaacttg
1560
ggTcCTggag gaaagacatt tctcaagtgc ctccCTTCTG CCGGCCTTT accggccccga
1620
cggccggcgc ctaaggggcc aaaccgccc gcccggaggg tcccaggGGC gggccccggA
1680
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1740
ggagctatgg gaaaaaaatg gagctgtgat tatggccgtg cggaggccag gctgtttct
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1860

ccccctctat gcagtggta
1879

<210> 2996
<211> 101
<212> PRT
<213> Homo sapiens

<400> 2996
His Gln Glu Arg Asn Phe Thr Leu Ala Ser Asp Tyr Phe Phe Ile Phe
1 5 10 15
Ile Phe Thr Leu Leu Leu Leu Leu Phe Leu Arg Trp Ser Leu Thr
20 25 30
Leu Xaa Thr Gln Ala Gly Ile Gln Trp Cys Asp Leu Ser Ser Leu Gln
35 40 45
Pro Pro Pro Pro Arg Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser
50 55 60
Ser Trp Asp Ser Asp Arg Cys Leu Pro Pro His Pro Gly Asp Phe Cys
65 70 75 80
Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Cys Ser Gly Trp Ser Arg
85 90 95
Thr Pro Asp Leu Lys
100

<210> 2997
<211> 800
<212> DNA
<213> Homo sapiens

<400> 2997
actcagatgg gcaccatcag tgctagacaa gaattctatt cctcttatcc aggccccc
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gagccatcca aagtgacatc tccagtggtc acctcttcca ccataaaaaga cattgtttct
120
acaaccatac ctgttcctc tgagataaca agaattgaga tggagtcaac atccaccctg
180
accccccacac caagggagac cagcacctcc caggagatcc actcagccac aaagccaagc
240
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300
tcctctagca gaggacctag ccctgatcag tccacaatgt cacaagacat atccactgaa
360
gtgatcacca ggctctctac ctccccatc aagacagaat ctacagaaat gaccattacc
420
acccaaacag ggtctcctgg ggctacatca aggggtaccc ttaccttggc cacttcaaca
480
acttttatgt cagggaccca ctcaactgca tctcaaagat tttcacactc acagatgacc
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600
cccgccctcg cctctttctc actggcttca cctgtcttga cctcattttt ttctgttttt
660
gcccatcccc aaaaacctcc accttttttg gttcctgggc aaacttttc cctagggctg
720

gggaaaccca aaatgtgggg ccaacccaga actgaaaacat tccccccaaat ggacaacctt
780
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800

<210> 2998

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2998

Thr	Gln	Met	Gly	Thr	Ile	Ser	Ala	Arg	Gln	Glu	Phe	Tyr	Ser	Ser	Tyr
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Pro	Gly	Leu	Pro	Glu	Pro	Ser	Lys	Val	Thr	Ser	Pro	Val	Val	Thr	Ser
				20					25				30		
Ser	Thr	Ile	Lys	Asp	Ile	Val	Ser	Thr	Thr	Ile	Pro	Ala	Ser	Ser	Glu
							35		40			45			
Ile	Thr	Arg	Ile	Glu	Met	Glu	Ser	Thr	Ser	Thr	Leu	Thr	Pro	Thr	Pro
					50		55				60				
Arg	Glu	Thr	Ser	Thr	Ser	Gln	Glu	Ile	His	Ser	Ala	Thr	Lys	Pro	Ser
					65		70			75			80		
Thr	Val	Pro	Tyr	Lys	Ala	Leu	Thr	Ser	Ala	Thr	Ile	Glu	Asp	Ser	Met
						85				90			95		
Thr	Gln	Val	Met	Ser	Ser	Ser	Arg	Gly	Pro	Ser	Pro	Asp	Gln	Ser	Thr
					100			105					110		
Met	Ser	Gln	Asp	Ile	Ser	Thr	Glu	Val	Ile	Thr	Arg	Leu	Ser	Thr	Ser
					115			120				125			
Pro	Ile	Lys	Thr	Glu	Ser	Thr	Glu	Met	Thr	Ile	Thr	Thr	Gln	Thr	Gly
					130		135				140				
Ser	Pro	Gly	Ala	Thr	Ser	Arg	Gly	Thr	Leu	Thr	Leu	Asp	Thr	Ser	Thr
					145		150			155			160		
Thr	Phe	Met	Ser	Gly	Thr	His	Ser	Thr	Ala	Ser	Gln	Arg	Phe	Ser	His
						165			170			175			
Ser	Gln	Met	Thr	Ala	Leu	Met	Ser	Arg	Thr	Pro	Gly	Asp	Val	Pro	Trp
					180			185				190			
Leu	Thr	His	Pro	Ser	Gly	Glu	Glu	Pro	Ala	Ser	Ala	Ser	Phe	Ser	Leu
					195			200			205				
Ala	Ser	Pro	Val	Leu	Thr	Ser	Phe	Phe	Ser	Phe	Phe	Ala	His	Ser	Gln
					210		215				220				
Lys	Pro	Pro	Pro	Phe	Leu	Val	Pro	Gly	Gln	Thr	Phe	Ser	Leu	Gly	Leu
					225		230			235			240		
Gly	Lys	Pro	Lys	Met	Trp	Gly	Gln	Pro	Arg	Thr	Glu	Thr	Phe	Pro	Pro
						245			250			255			
Met	Asp	Asn	Leu	Phe	Glu	Lys	Gly	Pro	Phe						
				260					265						

<210> 2999

<211> 550

<212> DNA

<213> Homo sapiens

<400> 2999

CCCPSSPNS

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 180
 ctggtcacca tgaacagcag caggaggcag acaggctcct gggtgaaag aagctggtcc
 240
 acagtgaaga cccacctcca agccaggaa agcctgaagc ctggggatg ggccgcagg
 300
 cccagaaaacc gcaagggcaa cttgtggtgc tttccctgg gcccacccat ggccgcggcat
 360
 ggacgaattt gcatgcactt tctccctct gagggccata aaagccccctg ggctcagcca
 420
 gagctgagcg gatatcagga cgacaagctg cacagaggta ctacccatac caaggcctcc
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 540
 cagggtctcc
 550

<210> 3000
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 3000
 Met Cys Ser Ser Gln Gln Arg Gly Gly Leu Gly Met Gly Ser Thr Ser
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 Val Gln Leu Val Val Leu Ile Ser Ala Gln Leu Trp Leu Ser Pro Gly
 20 25 30
 Ala Phe Met Gly Leu Arg Gly Glu Lys Val His Ala Asn Ser Ser Met
 35 40 45
 Gly Gly His Gly Trp Ala Gln Gly Lys Ala Pro Gln Val Ala Leu Ala
 50 55 60
 Val Ser Gly Thr Gly Asp Pro Ser Pro Arg Leu Gln Ala Phe Pro Gly
 65 70 75 80
 Leu Glu Val Gly Leu His Cys Gly Pro Ala Ser Phe His Pro Gly Ala
 85 90 95
 Cys Leu Pro Pro Ala Ala Val His Gly Asp Gln Ala Val His Val Lys
 100 105 110
 Gly Cys Leu Gln Ala Ser Thr Gly Leu Ser Ser Val His Pro Ser Ala
 115 120 125
 Ser Phe Pro Cys Leu Ser Val Pro Lys Ala Trp Arg Gly Pro Lys Trp
 130 135 140
 Gln Gly Gly Trp His Val Ser Thr Thr Pro Ser Met Cys Thr Leu Ser
 145 150 155 160
 Trp Ala Val Thr Ala Pro Gly
 165

<210> 3001
 <211> 1092
 <212> DNA
 <213> Homo sapiens

<400> 3001

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 120
 gaagtacaga gggtgagccc ctatgtatgc ctgggggagt cccagaaagt ggaatcccaa
 180
 ctttgcttag ctcaccagtg tttcttctat aaccagaca ttgcaaagac agcagtaccc
 240
 actgaggcat ccagcccagc tcagggcctg ccacccnnca gtaccaaagc atcattgtca
 300
 ggcaagggat acagaacaca gtgctctcac cagactgcag cttggggac acccagcacf
 360
 gagagaagct gaggcggAAC tgcactatct accggccctg gttctcccc tacagctact
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 660
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 720
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 780
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 1080
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 1092

<210> 3002
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 3002
 Met Ala Pro Phe Arg Ile Pro Gln Asp Val Ile His Asn Ser Ser Ala
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 Trp Leu Ser Leu Lys Gly His Cys Ser Val Ser Ala Leu Arg Cys Leu
 20 25 30
 Glu Val Gln Arg Leu Ser Pro Tyr Val Cys Leu Gly Glu Ser Gln Lys
 35 40 45
 Val Glu Ser Gln Pro Cys Ser Ala His Gln Cys Phe Phe Tyr Asn Pro
 50 55 60
 Asp Ile Ala Lys Thr Ala Val Pro Thr Glu Ala Ser Ser Pro Ala Gln

65	70	75	80
Ala	Leu	Pro	Pro
Xaa	Ser	Thr	Lys
Arg	Thr	Gln	Cys
		Ser	His
		Gln	Thr
		Ala	Ala
		Trp	Gly
			Thr
			Pro
			Ser
Glu	Arg	Ser	
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<210> 3003

<211> 474

<212> DNA

<213> Homo sapiens

<400> 3003

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tatggaaact ctgcggcat acaaccagga gcactcccag agttcacgt ttgatgtatgc
120
ccaacaggag gaccggaaga gactggcgga gctgctggtc tccgtcctgg aacagggctt
180
gccaccctcc caccgtgtca tctggctgca gagtgtccga atcctgtccc gggaccgcaa
240
ctgcctggac ccgttccacca gccggccagag cctgcaggca ctgcctgtatgc
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ctctgtctct gaggggtccg tcccaagatgc cgccagacatg gatgttgatc tggagtccct
360
caagtgcctg tgcaacctcg tgctcagcag ccctgtggca cagatgtgg cagcagaggc
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474

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<210> 3004

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3004

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20 25 30
Phe Thr Phe Asp Asp Ala Gln Gln Glu Asp Arg Lys Arg Leu Ala Glu
35 40 45
Leu Leu Val Ser Val Leu Glu Gln Gly Leu Pro Pro Ser His Arg Val
50 55 60
Ile Trp Leu Gln Ser Val Arg Ile Leu Ser Arg Asp Arg Asn Cys Leu
65 70 75 80
Asp Pro Phe Thr Ser Arg Gln Ser Leu Gln Ala Leu Ala Cys Tyr Ala
85 90 95
Asp Ile Ser Val Ser Glu Gly Ser Val Pro Glu Ser Ala Asp Met Asp
100 105 110
Val Val Leu Glu Ser Leu Lys Cys Leu Cys Asn Leu Val Leu Ser Ser
115 120 125
Pro Val Ala Gln Met Leu Ala Ala Glu Ala Arg Leu Val Val Lys Leu

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130	135	140
Thr	Glu	Arg
Val	Gly	Leu
Tyr	Arg	Glu
Ser		

145 150 155

<210> 3005
<211> 799
<212> DNA
<213> Homo sapiens

<400> 3005
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120
ccaggcctcg tgaagattgt ccgcaacagc cggcggaaag gactgatccg cgccggctg
180
cagggctgga aggccggccac cgccccagtc gtccggcttct ttgatgccc cgtcagttc
240
aacacgggct gggccgagcc cgcaactgtcg cggatccgag aggaccggcg tcgcacgtg
300
360
ctgccagcca tcgacaacat caagtacagc acgtttgagg tgcagcagta tgcgaacgcc
420
480
gccccatggct acaactgggg cctctggtgc atgtacatca tccccccgca ggactggctg
540
500
gaccggcgccg acgagtcagc acccatcagg accccagcca tgatcggtcg ctccattcgta
560
580
gtgggaccgcg agtacttcgg agacattggg ctgctggacc cggcatgga ggtgtatggc
640
660
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720
780
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799
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<210> 3006
<211> 266
<212> PRT
<213> Homo sapiens

<400> 3006
Val His Ser Val Val Asn His Thr Pro Ser Gln Leu Leu Lys Glu Val
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Ile Leu Val Asp Asp Asn Ser Asp Asn Val Glu Leu Lys Phe Asn Leu
20 25 30
Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg
35 40 45
Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys
50 55 60
Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

65	70	75	80
Asn Thr Gly Trp Ala Glu Pro Ala Leu Ser Arg Ile Arg Glu Asp Arg			
85	90	95	
Arg Arg Ile Val Leu Pro Ala Ile Asp Asn Ile Lys Tyr Ser Thr Phe			
100	105	110	
Glu Val Gln Gln Tyr Ala Asn Ala Ala His Gly Tyr Asn Trp Gly Leu			
115	120	125	
Trp Cys Met Tyr Ile Ile Pro Pro Gln Asp Trp Leu Asp Arg Gly Asp			
130	135	140	
Glu Ser Ala Pro Ile Arg Thr Pro Ala Met Ile Gly Cys Ser Phe Val			
145	150	155	160
Val Asp Arg Glu Tyr Phe Gly Asp Ile Gly Leu Leu Asp Pro Gly Met			
165	170	175	
Glu Val Tyr Gly Gly Glu Asn Val Glu Leu Gly Met Arg Val Trp Gln			
180	185	190	
Cys Gly Gly Ser Met Glu Val Leu Pro Cys Ser Arg Val Ala His Ile			
195	200	205	
Glu Arg Thr Arg Lys Pro Tyr Asn Asn Asp Ile Asp Tyr Tyr Ala Lys			
210	215	220	
Arg Asn Ala Leu Arg Thr Ala Glu Val Trp Met Asp Asp Phe Lys Ser			
225	230	235	240
His Val Tyr Met Ala Trp Asn Ile Pro Met Ser Asn Pro Gly Val Asp			
245	250	255	
Phe Gly Asp Val Ser Glu Arg Leu Ala Leu			
260	265		

<210> 3007

<211> 536

<212> DNA

<213> Homo sapiens

<400> 3007

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 120
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 180
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 240
 tcgaaaccaa aagatgtgga tgcccccgtc agtgattttta attttggAAC agctttgcat
 300
 attgcagcat acaacttgtg tgcaggtgct gtgaagtgcc tcttggagca gggagcaaAT
 360
 cctgcattta ggaatgacaa aggacagatc cctgctgtat ttgttccaga cccagtagat
 420
 atgccgttag agatggctga cgccgcagcc actgctaagg aaatcaagca gatgcttcta
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 536

<210> 3008

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3008
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 20 25 30
 Ala Asp Ile Ser Leu Arg Ser Arg Trp Thr Asn Met Asn Ala Leu His
 35 40 45
 Tyr Ala Ala Tyr Phe Asp Val Pro Glu Leu Ile Arg Val Ile Leu Lys
 50 55 60
 Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
 65 70 75 80
 Gly Thr Ala Leu His Ile Ala Ala Tyr Asn Leu Cys Ala Gly Ala Val
 85 90 95
 Lys Cys Leu Leu Glu Gln Gly Ala Asn Pro Ala Phe Arg Asn Asp Lys
 100 105 110
 Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
 115 120 125
 Glu Met Ala Asp Ala Ala Ala Thr Ala Lys Glu Ile Lys Gln Met Leu
 130 135 140
 Leu Asp Ala Val Pro Leu Ser Cys Asn Ile Ser Lys Ala Met Leu Pro
 145 150 155 160
 Pro Ser Arg

<210> 3009

<211> 1335

<212> DNA

<213> Homo sapiens

<400> 3009
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 300
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 420
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 840
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<210> 3010
 <211> 310
 <212> PRT
 <213> Homo sapiens

<400> 3010
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 Ser Gln Val Gly Arg Val Trp Pro Ser Ser Tyr Arg Ala Leu Ile Ser
 35 40 45
 Ala Phe Ser Arg Leu Thr Arg Leu Asp Asp Phe Thr Cys Lys Lys Ile
 50 55 60
 Gly Ser Gly Phe Phe Ser Glu Val Phe Lys Val Arg His Arg Ala Ser
 65 70 75 80
 Gly Gln Val Met Ala Leu Lys Met Asn Thr Leu Ser Ser Asn Arg Ala
 85 90 95
 Asn Met Leu Lys Glu Val Gln Leu Met Asn Arg Leu Ser His Pro Asn
 100 105 110
 Ile Leu Arg Phe Met Gly Val Cys Val His Gln Gly Gln Leu His Ala
 115 120 125
 Leu Thr Glu Tyr Ile Asn Ser Gly Asn Leu Glu Gln Leu Leu Asp Ser
 130 135 140
 Asn Leu His Leu Pro Trp Thr Val Arg Val Lys Leu Ala Tyr Asp Ile
 145 150 155 160
 Ala Val Gly Leu Ser Tyr Leu His Phe Lys Gly Ile Phe His Arg Asp
 165 170 175
 Leu Thr Ser Lys Asn Cys Leu Ile Lys Arg Asp Glu Asn Gly Tyr Ser

180	185	190
Ala Val Val Ala Asp Phe Gly Leu Ala Glu Lys Ile Pro Asp Val Ser		
195	200	205
Met Gly Ser Glu Lys Leu Ala Val Val Gly Ser Pro Phe Trp Met Ala		
210	215	220
Pro Glu Val Leu Arg Asp Glu Pro Tyr Asn Glu Lys Ala Asp Val Phe		
225	230	235
Ser Tyr Gly Ile Ile Leu Cys Glu Ile Ile Val Arg Ile Gln Ala Asp		
245	250	255
Pro Asp Tyr Leu Pro Arg Thr Glu Asn Phe Gly Leu Asp Tyr Asp Ala		
260	265	270
Phe Gln His Met Val Gly Asp Cys Pro Pro Asp Phe Leu Gln Leu Thr		
275	280	285
Phe Asn Cys Cys Asn Val Ser Val Phe Leu Pro Leu Pro Phe Ile Arg		
290	295	300
Gly Trp Leu Asn Pro Phe		
305	310	

<210> 3011

<211> 3253

<212> DNA

<213> Homo sapiens

<400> 3011

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 3240
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<210> 3012
 <211> 870
 <212> PRT
 <213> Homo sapiens

<400> 3012
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 Glu Ser Pro Asp Glu Leu Ser Phe Arg Lys Gly Asp Ile Met Thr Val
 20 25 30
 Leu Glu Gln Asp Thr Gln Gly Leu Asp Gly Trp Trp Leu Cys Ser Leu
 35 40 45
 His Gly Arg Gln Gly Ile Val Pro Gly Asn Arg Leu Lys Ile Leu Val
 50 55 60
 Gly Met Tyr Asp Lys Lys Pro Ala Gly Pro Gly Ser Gly Pro Pro Ala
 65 70 75 80
 Thr Pro Ala Gln Pro Gln Pro Gly Leu His Ala Pro Ala Pro Pro Ala
 85 90 95
 Ser Gln Tyr Thr Pro Met Leu Pro Asn Thr Tyr Gln Pro Gln Pro Asp
 100 105 110
 Ser Val Tyr Leu Val Pro Thr Pro Ser Lys Ala Gln Gln Gly Leu Tyr
 115 120 125
 Gln Val Pro Gly Pro Ser Pro Gln Phe Gln Ser Pro Pro Ala Lys Gln
 130 135 140
 Thr Ser Thr Phe Ser Lys Gln Thr Pro His His Pro Phe Pro Ser Pro
 145 150 155 160
 Ala Thr Asp Leu Tyr Gln Val Pro Pro Gly Pro Gly Gly Pro Ala Gln

	165	170	175
Asp Ile Tyr Gln Val Pro Pro Ser Ala Gly Met Gly His Asp Ile Tyr			
180	185	190	
Gln Val Pro Pro Ser Met Asp Thr Arg Ser Trp Glu Gly Thr Lys Pro			
195	200	205	
Pro Ala Lys Val Val Val Pro Thr Arg Val Gly Gln Gly Tyr Val Tyr			
210	215	220	
Glu Ala Ala Gln Pro Glu Gln Asp Glu Tyr Asp Ile Pro Arg His Leu			
225	230	235	240
Leu Ala Pro Gly Pro Gln Asp Ile Tyr Asp Val Pro Pro Val Arg Gly			
245	250	255	
Leu Leu Pro Ser Gln Tyr Gly Gln Glu Val Tyr Asp Thr Pro Pro Met			
260	265	270	
Ala Val Lys Gly Pro Asn Gly Arg Asp Pro Leu Leu Glu Val Tyr Asp			
275	280	285	
Val Pro Pro Ser Val Glu Lys Gly Leu Pro Pro Ser Asn His His Ala			
290	295	300	
Val Tyr Asp Val Pro Pro Ser Val Ser Lys Asp Val Pro Asp Gly Pro			
305	310	315	320
Leu Leu Arg Glu Glu Thr Tyr Asp Val Pro Pro Ala Phe Ala Lys Ala			
325	330	335	
Lys Pro Phe Asp Pro Ala Arg Thr Pro Leu Val Leu Gly Ala Pro Pro			
340	345	350	
Pro Asp Ser Pro Pro Ala Glu Asp Val Tyr Tyr Val Pro Pro Pro Ala			
355	360	365	
Pro Asp Leu Tyr Asp Val Pro Pro Gly Leu Arg Arg Pro Gly Pro Gly			
370	375	380	
Thr Leu Tyr Asp Val Pro Arg Glu Arg Val Leu Pro Pro Glu Val Ala			
385	390	395	400
Asp Gly Gly Val Val Asp Ser Gly Val Tyr Ala Val Pro Pro Pro Ala			
405	410	415	
Glu Arg Glu Ala Pro Ala Glu Gly Lys Arg Leu Ser Ala Ser Ser Thr			
420	425	430	
Gly Ser Thr Arg Ser Ser Gln Ser Ala Ser Ser Leu Glu Val Ala Gly			
435	440	445	
Pro Gly Arg Glu Pro Leu Glu Leu Glu Val Ala Val Glu Ala Leu Ala			
450	455	460	
Arg Leu Gln Gln Gly Val Ser Ala Thr Val Ala His Leu Leu Asp Leu			
465	470	475	480
Ala Gly Ser Ala Gly Ala Thr Gly Gly Trp Arg Ser Pro Ser Glu Pro			
485	490	495	
Gln Glu Pro Leu Val Gln Asp Leu Gln Ala Ala Val Ala Val Gln			
500	505	510	
Ser Ala Val His Glu Leu Leu Glu Phe Ala Arg Ser Ala Val Gly Asn			
515	520	525	
Ala Ala His Thr Ser Asp Arg Ala Leu His Ala Lys Leu Ser Arg Gln			
530	535	540	
Leu Gln Lys Met Glu Asp Val His Gln Thr Leu Val Ala His Gly Gln			
545	550	555	560
Ala Leu Asp Ala Gly Arg Gly Gly Ser Gly Ala Thr Leu Glu Asp Leu			
565	570	575	
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Glu Glu Phe Glu Lys Thr Gln Lys Glu Leu Leu Glu Lys Gly Asn Ile		
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Thr Arg Gln Gly Lys Ser Gln Leu Glu Leu Gln Gln Leu Lys Gln Phe		
690	695	700
Glu Arg Leu Glu Gln Glu Val Ser Arg Pro Ile Asp His Asp Leu Ala		
705	710	715
720		
Asn Trp Thr Pro Ala Gln Pro Leu Ala Pro Gly Arg Thr Gly Gly Leu		
725	730	735
Gly Pro Ser Asp Arg Gln Leu Leu Phe Tyr Leu Glu Gln Cys Glu		
740	745	750
Ala Asn Leu Thr Thr Leu Thr Asn Ala Val Asp Ala Phe Phe Thr Ala		
755	760	765
Val Ala Thr Asn Gln Pro Pro Lys Ile Phe Val Ala His Ser Lys Phe		
770	775	780
Val Ile Leu Ser Ala His Lys Leu Val Phe Ile Gly Asp Thr Leu Ser		
785	790	795
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Ala Ala Leu Gln Tyr Pro Ser Pro Ser Ala Ala Gln Asp Met Val Glu		
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<210> 3013

<211> 248

<212> DNA

<213> Homo sapiens

<400> 3013

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Lys Ala Ala Gln Gln Ala Gly Trp Gly Leu Leu Leu Ala Arg Arg Trp
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<210> 3015
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<211> 103
<212> PRT
<213> Homo sapiens

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35 40 45
Val Pro Gly Gly Met Val His Pro Ile Phe Leu Glu Pro Val Thr Val

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<210> 3017

<211> 4796

<212> DNA

<213> Homo sapiens

<400> 3017

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 <212> PRT
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 Gln Gly Leu Thr Pro Thr Pro Gly Ala Leu Pro Asn Tyr Leu Lys Val
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 Lys Ala Asn Arg Ala Ile Pro Gln Ala Val Thr Ser Thr Arg Leu Gly
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<210> 3019
 <211> 882
 <212> DNA
 <213> Homo sapiens

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<210> 3021
 <211> 1008
 <212> DNA
 <213> Homo sapiens

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<210> 3022

<211> 94

<212> PRT

<213> Homo sapiens

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His Cys Ser Leu Asp Leu Pro Gly Ser Ser Asp Pro Pro Gly Ser Pro		
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Pro Val Ala Gly Thr Thr Gly Ala Leu Pro His Arg Lys Ala His Phe		
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<210> 3023

<211> 1834

<212> DNA

<213> Homo sapiens

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<211> 347
<212> PRT
<213> Homo sapiens

<400> 3024

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Leu	Phe	Glu	Phe	Val	Thr	Asp	Pro	Ser	Ile	Thr	His	Glu	Asn	Met	Asp
					165			170					175		
Ala	Tyr	Leu	Ser	Lys	Ala	Met	Glu	Ile	Ala	Ser	Gln	Arg	Thr	Lys	Glu
					180			185					190		
Glu	Arg	Ser	Ser	Gln	Asp	His	Val	Asp	Glu	Glu	Val	Phe	Lys	Arg	Ala
					195			200					205		
Tyr	Ile	Pro	Arg	Thr	Leu	Asn	Glu	Val	Lys	Asn	Tyr	Glu	Arg	Asp	Met
					210			215					220		
Asp	Ile	Ile	Met	Lys	Leu	Lys	Glu	Glu	Asp	Met	Ala	Met	Asn	Ala	Gln
					225			230					240		
Gln	Asp	Asn	Ile	Leu	Pro	Asp	Cys	Tyr	Arg	Ile	Glu	Glu	Arg	Phe	Val
					245			250					255		
Arg	Ser	Ser	Glu	Gly	Pro	Cys	Thr	Leu	Glu	Asn	Gln	Val	Glu	Glu	Arg
					260			265					270		
Thr	Cys	Ser	Asp	Ser	Glu	Asp	Ile	Gly	Ser	Ser	Glu	Cys	Ser	Asp	Thr
					275			280					285		
Asp	Ser	Glu	Glu	Gln	Gly	Asp	His	Ala	Arg	Pro	Lys	Lys	His	Thr	Thr
					290			295					300		
Asp	Pro	Asp	Ile	Asp	Lys	Lys	Glu	Arg	Lys	Lys	Met	Val	Lys	Glu	Ala
					305			310					320		
Gln	Arg	Glu	Lys	Arg	Lys	Asn	Lys	Ile	Pro	Lys	His	Val	Lys	Lys	Arg
					325			330					335		
Lys	Glu	Lys	Thr	Ala	Lys	Thr	Lys	Lys	Gly	Lys					
					340			345							

<210> 3025
<211> 1370
<212> DNA
<213> Homo sapiens

<400> 3025
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tcaagagaag ataaaaattt aaactgctaa tcatacttagta ctactgctaa gccgctccaa
120
agcttctgaa gcatacttaggt gatcttctta aatcttgac aggaaagagt aggaaacttt
180
ttggcagact ttacctgggt gaatggactt gttttagaat caaggaaaag aagagaacat
240
ctcagtgaaag agatattct tcgaaataag gccatcatgg agagttttag taaagggtgga
300
aacataatgg aacagaattt tgagccgatt cgaagacagt ctcttacacc tcctcctcag
360
aacactatta catggaaaga atatataatct gctgaaaatg gaaaagctcc tcatactgggt
420
agagaattgg tgtgcaaaga gagtaagaaa acgtttaaag ctacgatagc catgagccag
480
gaatttccct tagggataga gttattattt aatgttttag aagtagtagc tcccttcaag
540
cactttaaca agcttagaga atttgttcag atgaagcttc ctccaggctt tcctgtaaaa
600
ttagatatac ctgtgtttcc cacaatcaca gccactgtga ctttcagga gtttcgatac
660
gatgaatttg atggctccat cttaactata cctgatgact acaaggaaga cccaagccgt
720
tttcctgate ttaactgac gtggaaaagg atgccgtcta accaaggaaa gaaaatacag
780
agaccctaga agtggatcca aatagaaggg acaaatgctt tcagtgaaga aaagggatt
840
acacattgaa tcgacacatc agtaatacga tacagtggaa tgggcctcta ataagaattt
900
cagcgagttt tctgatgtgc catttttgt cttttaaaa atatacatat tataaatgt
960
atagtttgac acattaatga ccctaagacc tgcttatgtg aagcagctat gagtgctgt
1020
atttgtttt aaaaattttt acacttcttg ttgaaatata tatgcatata aatatatcta
1080
tatctatatc tatatctaaa acactcctgg accattaacg taaattaaat gtcttaagag
1140
atatggagcc cttaactact tgcatacttt atgcaaggtg acatttataa atattcctc
1200
gagcttggtt ttcataaaaat gtaaactatg taacattatg tatagttcag taatttgaat
1260
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1320
gtaaccatta aacaattgca tttaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
1370

<210> 3026
<211> 152
<212> PRT
<213> Homo sapiens

<400> 3026

Met	Glu	Ser	Leu	Ser	Lys	Gly	Gly	Asn	Ile	Met	Glu	Gln	Asn	Phe	Glu	
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Pro	Ile	Arg	Arg	Gln	Ser	Leu	Thr	Pro	Pro	Pro	Gln	Asn	Thr	Ile	Thr	
										20				25	30	
Trp	Glu	Glu	Tyr	Ile	Ser	Ala	Glu	Asn	Gly	Lys	Ala	Pro	His	Leu	Gly	
										35				40	45	
Arg	Glu	Leu	Val	Cys	Lys	Glu	Ser	Lys	Lys	Thr	Phe	Lys	Ala	Thr	Ile	
										50				55	60	
Ala	Met	Ser	Gln	Glu	Phe	Pro	Leu	Gly	Ile	Glu	Leu	Leu	Leu	Asn	Val	
										65				70	75	80
Leu	Glu	Val	Val	Ala	Pro	Phe	Lys	His	Phe	Asn	Lys	Leu	Arg	Glu	Phe	
										85				90	95	
Val	Gln	Met	Lys	Leu	Pro	Pro	Gly	Phe	Pro	Val	Lys	Leu	Asp	Ile	Pro	
										100				105	110	
Val	Phe	Pro	Thr	Ile	Thr	Ala	Thr	Val	Thr	Phe	Gln	Glu	Phe	Arg	Tyr	
										115				120	125	
Asp	Glu	Phe	Asp	Gly	Ser	Ile	Phe	Thr	Ile	Pro	Asp	Asp	Tyr	Lys	Glu	
										130				135	140	
Asp	Pro	Ser	Arg	Phe	Pro	Asp	Leu									
										145				150		

<210> 3027

<211> 1154

<212> DNA

<213> Homo sapiens

<400> 3027

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120					
cgcagacggc	ggcctccgcg	gcgctctcca	gtcatggact	accggcggt	tctcatgagc
180					
cgggtggtcc	ccggggcaatt	cgacgacgcg	gactcctctg	acagtaaaaa	cagagacttg
240					
aagacagtca	aagagaagga	tgacattctg	tttgaagacc	ttcaagacaa	tgtgaatgag
300					
aatggtaag	gtgaaataga	agatgaggag	gaggagggtt	atgatgatga	tgtatgatgac
360					
tgggactggg	atgaaggagt	tggaaaactc	gccaaagggtt	atgtctggaa	tggaggaagc
420					
aacccacagg	caaatcgaca	gacctccgac	agcagttcag	ccaaaatgtc	tactccagca
480					
gacaaggct	tacgaaatt	tgagaataaa	attaatttag	ataagctaaa	tgttactgtat
540					
tccgtataa	ataaagtac	cgaaaagtct	agacaaaagg	aagcagatat	gtatcgcatc
600					
aaagataagg	cagacagagc	aactgttagaa	caggtgttgg	atcccagaac	aagaatgatt
660					
ttattcaaga	tgttgactag	aggaatcata	acagagataa	atggctgcat	tagcacagga
720					
aaagaagcta	atgtatacca	tgctagcaca	gcaaatggag	agagcagagc	aatcaaaatt
780					

tataaaaactt ctattttgtt gttcaaagat cgggataaaat atgttaagtgg agaattcaga
 840
 tttcgcatg gctattgtaa aggaaaccct aggaaaatgg tgaaaacttg ggcagaaaaa
 900
 gaaatgagga acttaatcag gctaaacaca gcagagatac catgtccaga accaataatg
 960
 1020
 ctaagaagtc atgttcttgt catgagttc atcggtaaag atgacatttc ttttcattca
 1080
 aggccgcac cactcttgaa aaatgtccag ttatcagaat ccaaggctcg ggagttgtac
 1140
 ctgcaggtca ttcaagtacat gagaagaatg tatcaggatg ccagacttgt ccatgcagat
 1154
 cgtcggtgag aggc

<210> 3028
<211> 331
<212> PRT
<213> Homo sapiens

<400> 3028
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 Asp Asp Ala Asp Ser Ser Asp Ser Glu Asn Arg Asp Leu Lys Thr Val
 20 25 30
 Lys Glu Lys Asp Asp Ile Leu Phe Glu Asp Leu Gln Asp Asn Val Asn
 35 40 45
 Glu Asn Gly Glu Gly Glu Ile Glu Asp Glu Glu Glu Gly Tyr Asp
 50 55 60
 Asp Asp Asp Asp Trp Asp Trp Asp Glu Gly Val Gly Lys Leu Ala
 65 70 75 80
 Lys Gly Tyr Val Trp Asn Gly Gly Ser Asn Pro Gln Ala Asn Arg Gln
 85 90 95
 Thr Ser Asp Ser Ser Ser Ala Lys Met Ser Thr Pro Ala Asp Lys Val
 100 105 110
 Leu Arg Lys Phe Glu Asn Lys Ile Asn Leu Asp Lys Leu Asn Val Thr
 115 120 125
 Asp Ser Val Ile Asn Lys Val Thr Glu Lys Ser Arg Gln Lys Glu Ala
 130 135 140
 Asp Met Tyr Arg Ile Lys Asp Lys Ala Asp Arg Ala Thr Val Glu Gln
 145 150 155 160
 Val Leu Asp Pro Arg Thr Arg Met Ile Leu Phe Lys Met Leu Thr Arg
 165 170 175
 Gly Ile Ile Thr Glu Ile Asn Gly Cys Ile Ser Thr Gly Lys Glu Ala
 180 185 190
 Asn Val Tyr His Ala Ser Thr Ala Asn Gly Glu Ser Arg Ala Ile Lys
 195 200 205
 Ile Tyr Lys Thr Ser Ile Leu Val Phe Lys Asp Arg Asp Lys Tyr Val
 210 215 220
 Ser Gly Glu Phe Arg Phe Arg His Gly Tyr Cys Lys Gly Asn Pro Arg
 225 230 235 240
 Lys Met Val Lys Thr Trp Ala Glu Lys Glu Met Arg Asn Leu Ile Arg
 245 250 255
 Leu Asn Thr Ala Glu Ile Pro Cys Pro Glu Pro Ile Met Leu Arg Ser

260	265	270
His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp Ile Ser Phe His		
275	280	285
Ser Arg Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys		
290	295	300
Ala Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr		
305	310	315
Gln Asp Ala Arg Leu Val His Ala Asp Arg Arg		
325	330	

<210> 3029

<211> 344

<212> DNA

<213> Homo sapiens

<400> 3029

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 ctgaaaagat tcgattttga ttatacaacc atgcatacgaa ttaaactgaa tgatcgaatg
 120
 acatttcccg aggaactaga tatgagtact tttattgatg ttgaagatga aaaatctcct
 180
 cagactgaaa gttgcactga caggggagca gaaaatgaag gtagttgtca cagtgatcag
 240
 atgagcaacg atttctccaa tcatgtatggt gttgatgaag gaatctgttt tgaaaccaat
 300
 agtggaaactg aaaagatctc aaaatctgga cctgaaaaga attc
 344

<210> 3030

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3030

Thr Arg Asp Ala Arg Lys Gly Leu Arg Phe Leu His Phe Pro Tyr Leu			
1	5	10	15
Leu Thr Leu Gln Leu Lys Arg Phe Asp Phe Asp Tyr Thr Thr Met His			
20	25	30	
Arg Ile Lys Leu Asn Asp Arg Met Thr Phe Pro Glu Glu Leu Asp Met			
35	40	45	
Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr Glu Ser			
50	55	60	
Cys Thr Asp Arg Gly Ala Glu Asn Glu Gly Ser Cys His Ser Asp Gln			
65	70	75	80
Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly Ile Cys			
85	90	95	
Phe Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly Pro Glu			
100	105	110	
Lys Asn			

<210> 3031

<211> 567

<212> DNA

<213> Homo sapiens

<400> 3031
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 120
 gttggcctcg atgttattcc cctgccacac atctacggag ctcgaatcaa aggtgtggaa
 180
 gtgttctgtc ctctggatcc cccggcccca tatgaagctg tggtgagcca gatggaccag
 240
 gagcaggat cttcattcca aatgtcagaa ggatcagaag ctgctgtgat cccattggat
 300
 ctgggctgca cacaagtgcac tcaagatggg gacattccta acatacctgc cgaagaaaaat
 360
 gcatccaccc caactcccag ttcaaccctg gtgcgtccta tcagaagccg gagagccctc
 420
 ccacccttga ggaccaggc gaagagtgac cctgtgctcc atccttctga ggagagagct
 480
 gccccagtc tcagctgtga agctgcaaca cagactgaaa ggagactgga tctggctgca
 540
 gtgactctga ggagaggctt gagatct
 567

<210> 3032

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3032
 Ala Glu Glu Ala Glu Asp His Gly Arg Ile Pro Asp Pro Asp Asp Phe
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 20 25 30
 Thr Pro Arg Met Asn Arg Arg Leu Val Gly Pro Asp Val Ile Pro Leu
 35 40 45
 Pro His Ile Tyr Gly Ala Arg Ile Lys Gly Val Glu Val Phe Cys Pro
 50 55 60
 Leu Asp Pro Pro Pro Tyr Glu Ala Val Val Ser Gln Met Asp Gln
 65 70 75 80
 Glu Gln Gly Ser Ser Phe Gln Met Ser Glu Gly Ser Glu Ala Ala Val
 85 90 95
 Ile Pro Leu Asp Leu Gly Cys Thr Gln Val Thr Gln Asp Gly Asp Ile
 100 105 110
 Pro Asn Ile Pro Ala Glu Glu Asn Ala Ser Thr Ser Thr Pro Ser Ser
 115 120 125
 Thr Leu Val Arg Pro Ile Arg Ser Arg Arg Ala Leu Pro Pro Leu Arg
 130 135 140
 Thr Arg Ser Lys Ser Asp Pro Val Leu His Pro Ser Glu Glu Arg Ala
 145 150 155 160
 Ala Pro Val Leu Ser Cys Glu Ala Ala Thr Gln Thr Glu Arg Arg Leu
 165 170 175
 Asp Leu Ala Ala Val Thr Leu Arg Arg Gly Leu Arg Ser

180

185

<210> 3033
 <211> 821
 <212> DNA
 <213> Homo sapiens

<400> 3033
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 ttcctatgga atgaggagga cgaaatggac atgacttggg agaagagact tgctaagaaa
 120
 tactatgata aattatcaa ggaatactgc atagcagatc tcagtaataa taaagaaaaat
 180
 aagtttggat ttaggtggcg agtagaaaaa gaagtaattt cagaaaaagg tcaattttc
 240
 tgtggaaata aatattgtga taaaaaagaa ggcttaaaga gttgggaagt taatttttgt
 300
 tatattgagc atggtgagaa gagaaatgca ctgtttaaat taaggttatg ccaagaatgt
 360
 tccattaaat taaatttcca tcacaggaga aaagaaatca agtcaaaaaa aagaaaaagat
 420
 aaaaccaaaa aagactgtga agagtcatca cataaaaaat ccagattatc ttctgcagaa
 480
 gaggcctcca agaaaaaaga taaaggacat tcatcttcaa agaaatctga agattctcta
 540
 cttagaaact ctgatgagga agaaagtgc tcagaatctg aactttggaa gggtccacta
 600
 ccagagacag ataaaaatc acaggaagaa gaatttgatg agtattttca ggatttttt
 660
 ctatgagacg agagagagaa gcctccgctc cttaatgtga aacttcatga agttttaaac
 720
 ctcatgcaat ttgaaattcc atctacgtct ttatctgcaa gttacagctt ctgtgcttt
 780
 tcttcgcaac tacaaatcca ggttctctca gcaacaacac a
 821

<210> 3034
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 3034
 Xaa Arg Val Lys Gly Glu Asn Asp Lys Thr Asp Leu Asp Val Ile Arg
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 Glu Asn His Arg Phe Leu Trp Asn Glu Glu Asp Glu Met Asp Met Thr
 20 25 30
 Trp Glu Lys Arg Leu Ala Lys Lys Tyr Tyr Asp Lys Leu Phe Lys Glu
 35 40 45
 Tyr Cys Ile Ala Asp Leu Ser Lys Tyr Lys Glu Asn Lys Phe Gly Phe
 50 55 60
 Arg Trp Arg Val Glu Lys Glu Val Ile Ser Gly Lys Gly Gln Phe Phe
 65 70 75 80
 Cys Gly Asn Lys Tyr Cys Asp Lys Glu Gly Leu Lys Ser Trp Glu

85	90	95
Val Asn Phe Gly Tyr Ile Glu His	Gly Glu Lys Arg Asn Ala Leu Val	
100	105	110
Lys Leu Arg Leu Cys Gln Glu Cys Ser Ile Lys Leu Asn Phe His His		
115	120	125
Arg Arg Lys Glu Ile Lys Ser Lys Lys Arg Lys Asp Lys Thr Lys Lys		
130	135	140
Asp Cys Glu Glu Ser Ser His Lys Lys Ser Arg Leu Ser Ser Ala Glu		
145	150	155
Glu Ala Ser Lys Lys Asp Lys Gly His Ser Ser Ser Lys Lys Ser		
165	170	175
Glu Asp Ser Leu Leu Arg Asn Ser Asp Glu Glu Ser Ala Ser Glu		
180	185	190
Ser Glu Leu Trp Lys Gly Pro Leu Pro Glu Thr Asp Glu Lys Ser Gln		
195	200	205
Glu Glu Glu Phe Asp Glu Tyr Phe Gln Asp Leu Phe Leu		
210	215	220

<210> 3035

<211> 878

<212> DNA

<213> Homo sapiens

<400> 3035

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 120
 cctcagacca cgacaggggc ctccccacaca cggctcgca aacctgtgca aggagaacca
 180
 caaaggatga gcaactctggc ccacccaaaa ccatggcagc cctgagggca cagactggac
 240
 accctgcaga gtctcactct gtcattcagg gtggagtgc aatggcgcaat ctcagctcac
 300
 tgcaacctcc cactccccggg ctcaagcaat tctcctgacc cacactcagg cccagctcct
 360
 tccccagactg tcatcctctt tctagaagga aacagggacc ctgggggtcg gggatggccc
 420
 tgagctccct gctgtgcccc acacctggcg ggtctttgcc cacatgtgcc tagagtctgc
 480
 atgctctgcc ccatggctac ccgctgctgc ctgcaagggtt ccagagtcac gtccccagtg
 540
 agtctctgac cggcggcca gcacaccagt gtgaatcagc tgtgtcccca gtgagtctct
 600
 gacccggcgg ccagcgcacc agtgtgaatc acatgcgtcc ccagttagtc tctgaccgg
 660
 cgaccagagc accagtgtga atcacatgcg tccccggta gtctctgcag ggtgtccagt
 720
 ctgtgcctc agggctgcca tggttttggg tgggccagag tgctcatcct ttgtggttct
 780
 ccttgcacaa gttctgcgag ccatgtgtgg gaggccctg tcgtggtctg aggacgtccc
 840
 gggttagaat ctgtaggctg ggcaccttcc gggAACCG
 878

<210> 3036
<211> 65
<212> PRT
<213> Homo sapiens

<400> 3036
Gly His Arg Leu Asp Thr Leu Gln Ser Leu Thr Leu Ser Phe Arg Val
1 5 10 15
Glu Cys Asn Gly Ala Ile Ser Ala His Cys Asn Leu Pro Leu Pro Gly
20 25 30
Ser Ser Asn Ser Pro Asp Pro His Ser Gly Pro Ala Pro Ser Gln Thr
35 40 45
Val Ile Leu Phe Leu Glu Gly Asn Arg Asp Pro Gly Gly Arg Gly Trp
50 55 60
Pro
65

<210> 3037
<211> 3538
<212> DNA
<213> Homo sapiens

<400> 3037
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acaaagaaac ttcttgatga acaagaacaa gaagatgagg aagccagcac tggatctcat
120
ctcaagctca tagtagatgc tttcctacag cagttaccca actgtgtcaa ccgagatctg
180
atagacaagg cagcaatgga ttttgcatt aacatgaaca caaaagcaaa caggaagaag
240
tttgtacggg cactcttcat agttcctaga caaagggtgg atttgctacc attttatgca
300
agattggttg ctacattgca tccctgcatt tctgatgttag cagaggatct ttgttccatg
360
ctgagggggg atttcagatt tcatgtacgg aaaaaggacc agatcaatat tgaaacaaag
420
aataaaaactg ttcgttttat aggagaacta actaagtttta agatgttcac caaaaatgac
480
acactgcatt gtttaaagat gtttctgtca gacttctctc atcaccatat tgaaatggca
540
tgcacctgc tggagacatg tggacggttt ctttcagat ctccagaatc tcacctgagg
600
accagtgtac ttttggagca aatgatgaga aagaagcaag caatgcattt tgatgcgaga
660
tacgtcacaa tggtagagaa tgcatttttac tactgcaacc cacctccagc tgaaaaaacc
720
gtgaaaaaaga aacgtcctcc tctccaggaa tatgtccgga aactttgttta caaggatctc
780
tctaaggta ccaccgagaa ggtttgaga cagatgcgaa agctgccctg gcaggaccaa
840
gaagtgaaag actatgttat ttgttgtatg ataaacatct ggaatgtgaa atataatagt
900

attcattgtg tagccaacct cttagcagga ctagtgcct accaagagga tggatggatc
960
cacgttgtgg atggagtgtt agaagatatt cgattaggaa tggaggttaa tcaacctaaa
1020
ttaaatcaga ggcgcatacg cagtgccaaag ttcttaggag aactttacaa ttaccgaatg
1080
gtgaaatcag ctgttatattt cagaactctg tattctttt cctcatttgg tgtaatcct
1140
gatggctctc caagttccct ggacccaccc gacatctt tcagaatttag actcgatgc
1200
actattctgg acacatgtgg ccagttactt gacagaggtt ccagtaaacg aaaacttgat
1260
tgtttccttg tatattttca gcgttatgtt tggtggaga aaagtttggaa ggtttggaca
1320
aaagaccatc catttcctat tgatatacat tacatgatca gtgatacact agaactgcta
1380
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1440
gaacgagaat tcttaataaa actaggccta gtaaatgaca aagactcaaa agattttatg
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1560
gaacaatctg gaaatgaaag tgaagtaaat gagccagaag aagaggaggg ttctgataat
1620
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1680
aaggaaaatg aaaccgatga agagaatact gagtaatga taaaaggcgg tggacttaag
1740
catgtacctt gtgttagaaga tgaggacttc attcaagctc tggataaaat gatgctagaa
1800
aatctacagc aacgaagtgg tgaatctttt aaagtgcacc aactagatgt tgccattcct
1860
ttgcatactca aaagccagct gaggaaaggg cccccactgg gaggtgggaa aggagaggct
1920
gagtctgcag acacaatgcc gtttgcatacg ttaacaagaa aaggcaataa acagcagttt
1980
aagatcctta atgtacccat gtcctctcaa cttgcgtcaa atcactggaa ccagcaacag
2040
gcagaacaag aagagaggat gagaatgaaa aagtcacac tagatatcaa tgaacggcaa
2100
gaacaagaag attatcaaga aatgttgcag tctcttgcac agcgcccagc tccagcaaac
2160
accaatctg agaggcggcc tcgctaccaa catccgaagg gacaccta tgcagatcta
2220
atctttaaga ctgggtggag gagacgttga tccagcagca cgtgtcattt cattaggtcc
2280
tgtatctgtat gttgtggta gtggagttt ccagcaattt aatgagagca gtggacacat
2340
ctcagcaggt cggcttagag agttgcgtt ctaaacctgg gacaggctgg ggccaggagg
2400
cagaaacacc agcctctgcc aacaccggaa caagccgacg cttccagaca aggcggaaaa
2460
ggcctttgt aatggaaatc tcgctgggtt taatcttctc ttgagaatgg cagtcaagaa
2520

atgagatgg tcaactgact actgaggcagt tacaccaagg agagcgtgaa ggggatgatt
 2580
 gagccagaga agaaacgggt tgtgatggta atggtgtggg ggaaatgaac ttgagcttta
 2640
 aacttgattt gagtttcatt gtctctgaat tgaacatccc acgttggaaag aagatacatt
 2700
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 2760
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 2820
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 3538

<210> 3038
 <211> 697
 <212> PRT
 <213> Homo sapiens

<400> 3038
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 35 40 45
 Arg Leu Val Ala Thr Leu His Pro Cys Met Ser Asp Val Ala Glu Asp
 50 55 60
 Leu Cys Ser Met Leu Arg Gly Asp Phe Arg Phe His Val Arg Lys Lys
 65 70 75 80
 Asp Gln Ile Asn Ile Glu Thr Lys Asn Lys Thr Val Arg Phe Ile Gly
 85 90 95
 Glu Leu Thr Lys Phe Lys Met Phe Thr Lys Asn Asp Thr Leu His Cys

100	105	110
Leu Lys Met Leu Leu Ser Asp Phe Ser His His His Ile Glu Met Ala		
115	120	125
Cys Thr Leu Leu Glu Thr Cys Gly Arg Phe Leu Phe Arg Ser Pro Glu		
130	135	140
Ser His Leu Arg Thr Ser Val Leu Leu Glu Gln Met Met Arg Lys Lys		
145	150	155
Gln Ala Met His Leu Asp Ala Arg Tyr Val Thr Met Val Glu Asn Ala		
165	170	175
Tyr Tyr Tyr Cys Asn Pro Pro Ala Glu Lys Thr Val Lys Lys Lys		
180	185	190
Arg Pro Pro Leu Gln Glu Tyr Val Arg Lys Leu Leu Tyr Lys Asp Leu		
195	200	205
Ser Lys Val Thr Thr Glu Lys Val Leu Arg Gln Met Arg Lys Leu Pro		
210	215	220
Trp Gln Asp Gln Glu Val Lys Asp Tyr Val Ile Cys Cys Met Ile Asn		
225	230	235
Ile Trp Asn Val Lys Tyr Asn Ser Ile His Cys Val Ala Asn Leu Leu		
245	250	255
Ala Gly Leu Val Leu Tyr Gln Glu Asp Val Gly Ile His Val Val Asp		
260	265	270
Gly Val Leu Glu Asp Ile Arg Leu Gly Met Glu Val Asn Gln Pro Lys		
275	280	285
Phe Asn Gln Arg Arg Ile Ser Ser Ala Lys Phe Leu Gly Glu Leu Tyr		
290	295	300
Asn Tyr Arg Met Val Glu Ser Ala Val Ile Phe Arg Thr Leu Tyr Ser		
305	310	315
Phe Thr Ser Phe Gly Val Asn Pro Asp Gly Ser Pro Ser Ser Leu Asp		
325	330	335
Pro Pro Glu His Leu Phe Arg Ile Arg Leu Val Cys Thr Ile Leu Asp		
340	345	350
Thr Cys Gly Gln Tyr Phe Asp Arg Gly Ser Ser Lys Arg Lys Leu Asp		
355	360	365
Cys Phe Leu Val Tyr Phe Gln Arg Tyr Val Trp Trp Lys Lys Ser Leu		
370	375	380
Glu Val Trp Thr Lys Asp His Pro Phe Pro Ile Asp Ile Asp Tyr Met		
385	390	395
Ile Ser Asp Thr Leu Glu Leu Leu Arg Pro Lys Ile Lys Leu Cys Asn		
405	410	415
Ser Leu Glu Glu Ser Ile Arg Gln Val Gln Asp Leu Glu Arg Glu Phe		
420	425	430
Leu Ile Lys Leu Gly Leu Val Asn Asp Lys Asp Ser Lys Asp Phe Met		
435	440	445
Thr Glu Gly Glu Asn Leu Glu Glu Asp Glu Glu Glu Glu Gly Gly		
450	455	460
Ala Glu Thr Glu Glu Gln Ser Gly Asn Glu Ser Glu Val Asn Glu Pro		
465	470	475
Glu Glu Glu Gly Ser Asp Asn Asp Asp Asp Glu Gly Glu Glu Glu		
485	490	495
Glu Glu Glu Asn Thr Asp Tyr Leu Thr Asp Ser Asn Lys Glu Asn Glu		
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Thr Asp Glu Glu Asn Thr Glu Val Met Ile Lys Gly Gly Leu Lys		
515	520	525
His Val Pro Cys Val Glu Asp Glu Asp Phe Ile Gln Ala Leu Asp Lys		

530	535	540
Met Met Leu Glu Asn Leu Gln Gln Arg Ser Gly	Glu Ser Val Lys Val	
545	550	555
His Gln Leu Asp Val Ala Ile Pro Leu His	Leu Lys Ser Gln Leu Arg	560
565	570	575
Lys Gly Pro Pro Leu Gly Gly	Gly Glu Ala Glu Ser Ala Asp	
580	585	590
Thr Met Pro Phe Val Met Leu Thr Arg Lys	Gly Asn Lys Gln Gln Phe	
595	600	605
Lys Ile Leu Asn Val Pro Met Ser Ser Gln	Leu Ala Ala Asn His Trp	
610	615	620
Asn Gln Gln Gln Ala Glu Gln Glu Glu Arg	Met Arg Met Lys Lys Leu	640
625	630	635
Thr Leu Asp Ile Asn Glu Arg Gln Glu Gln	Glu Asp Tyr Gln Glu Met	
645	650	655
Leu Gln Ser Leu Ala Gln Arg Pro Ala Pro	Ala Asn Thr Asn Arg Glu	
660	665	670
Arg Arg Pro Arg Tyr Gln His Pro Lys	Gly Ala Pro Asn Ala Asp Leu	
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Ile Phe Lys Thr Gly Gly Arg Arg Arg		
690	695	

<210> 3039
<211> 1836
<212> DNA
<213> Homo sapiens

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120					
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180					
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300					
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360					
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420					
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480					
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540					
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600					
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660					
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720					
taacataaa	gtatatgtct	gattatttgt	tctcatgttt	atttacaat	actaaagccc
780					

aaactatggt aaattgcttt acatctctac caggtcacct gatatacagg aaataaaaact
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 1260
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 1380
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 1440
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 1680
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 1740
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 1836

<210> 3040
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 3040
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 Leu Pro Asp Thr Ala Thr Gly Leu Asp Trp Thr His Leu Val Asp Ala
 20 25 30
 Ala Arg Ala Phe Glu Asp Gln Arg Val Ala Ser Phe Cys Thr Leu Thr
 35 40 45
 Asp Met Gln His Gly Gln Asp Leu Glu Gly Ala Gln Glu Leu Pro Leu
 50 55 60
 Cys Val Asp Pro Gly Ser Gly Lys Glu Phe Met Asp Thr Thr Gly Glu
 65 70 75 80
 Arg Ser Pro Ser Pro Leu Thr Gly Lys Val Asn Gln Leu Glu Leu Ile

85	90	95
Leu Arg Gln Leu Gln Thr Asp Leu Arg Lys Glu Lys Gln Asp Lys Ala		
100	105	110
Gly Leu Gln Ala Glu Val Gln His Leu Arg Gln Asp Asn Met Arg Leu		
115	120	125
Gln Glu Ser Gln Thr Ala Thr Ala Gln Leu Arg Lys Leu		
130	135	140

<210> 3041

<211> 1512

<212> DNA

<213> Homo sapiens

<400> 3041

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 180
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 420
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 1200

ccagagcctc gtatcatcat gtgaggggat gcagtggggc tggccgagcc ccggtttcc
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 1380
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 1512

<210> 3042
 <211> 360
 <212> PRT
 <213> Homo sapiens

<400> 3042
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 20 25 30
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 35 40 45
 Val Ile Leu Ala Val Ser Tyr Met Ser Gln Val Leu Glu Lys Glu Met
 50 55 60
 Lys Ala Gln Glu Gln Arg Leu Gly Ile Arg Ile Ser Met Ser His Glu
 65 70 75 80
 Glu Glu Pro Leu Gly Thr Ala Gly Pro Leu Ala Leu Ala Arg Asp Leu
 85 90 95
 Leu Ser Glu Thr Ala Asp Pro Phe Phe Val Leu Asn Ser Asp Val Ile
 100 105 110
 Cys Asp Phe Pro Phe Gln Ala Met Val Gln Phe His Arg His His Gly
 115 120 125
 Gln Glu Gly Ser Ile Leu Val Thr Lys Val Glu Pro Ser Lys Tyr
 130 135 140
 Gly Val Val Val Cys Glu Ala Asp Thr Gly Arg Ile His Arg Phe Val
 145 150 155 160
 Glu Lys Pro Gln Val Phe Val Ser Asn Lys Ile Asn Ala Gly Met Tyr
 165 170 175
 Ile Leu Ser Pro Ala Val Leu Arg Arg Ile Gln Leu Gln Pro Thr Ser
 180 185 190
 Ile Glu Lys Glu Val Phe Pro Ile Met Ala Lys Glu Gly Gln Leu Tyr
 195 200 205
 Ala Met Glu Leu Gln Gly Phe Trp Met Asp Ile Gly Gln Pro Lys Asp
 210 215 220
 Phe Leu Thr Gly Met Cys Leu Phe Leu Gln Ser Leu Arg Gln Lys Gln
 225 230 235 240
 Pro Glu Arg Leu Cys Ser Gly Pro Gly Ile Val Gly Asn Val Leu Val
 245 250 255
 Asp Pro Ser Ala Arg Ile Gly Gln Asn Cys Ser Ile Gly Pro Asn Val
 260 265 270
 Ser Leu Gly Pro Gly Val Val Glu Asp Gly Val Cys Ile Arg Arg

275	280	285
Cys Thr Val Leu Arg Asp Ala Arg Ile Arg Ser His Ser Trp Leu Glu		
290	295	300
Ser Cys Ile Val Gly Trp Arg Cys Arg Val Gly Gln Trp Val Arg Met		
305	310	315
Glu Asn Val Thr Val Leu Gly Glu Asp Val Ile Val Asn Asp Glu Leu		
325	330	335
Tyr Leu Asn Gly Ala Ser Val Leu Pro His Lys Ser Ile Gly Glu Ser		
340	345	350
Val Pro Glu Pro Arg Ile Ile Met		
355	360	

<210> 3043

<211> 394

<212> DNA

<213> Homo sapiens

<400> 3043

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120
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180
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240
ccagectttg tttggggact cggaggcaga gtagacagtt acccttaccc ctgggttggg
300
gaggggtcata ttccctggat ccccaggagg tcaacagggg cttcattttt ctgagggact
360
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394

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<210> 3044

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3044

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Gln Arg Leu Gly Asn Ile Ser Leu Lys Leu Glu Asn His Cys Pro Phe			
35	40	45	
Asn Asp Thr Gln Pro Glu Asp Pro Lys Thr Gly Ser Pro Leu Lys Cys			
50	55	60	
Gln Arg His Val Ser Trp Ser Glu Val Arg Glu Ala Asp Ser Gly Leu			
65	70	75	80
Leu Leu Gly Gln Thr Pro Val Lys Arg Lys Arg Trp His His Glu Thr			
85	90	95	
Ser Ser Phe Ser Pro Cys Leu Trp Leu Lys Ala Arg Ala Ser Arg Ser			
100	105	110	
Lys Glu Ile			

115

<210> 3045
 <211> 605
 <212> DNA
 <213> Homo sapiens

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 120
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 180
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 240
 aacattgaaa agtggcctga caatggtagg gaaagtggtg actcagctga caggcacact
 300
 gccttcaggt gtgacagaag atgatgtgc catccacagt aattcacggc ggagtccctt
 360
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 420
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 480
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 605

<210> 3046
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 3046
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 Ser Asp Gly Ile Val Ala His Phe Pro Ala His Glu Lys Pro Val Cys
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 Cys Met Ala Phe Asn Thr Ser Gly Met Leu Leu Val Thr Thr Asp Thr
 35 40 45
 Leu Gly His Asp Phe His Val Phe Gln Ile Leu Thr His Pro Trp Ser
 50 55 60
 Ser Ser Thr Glu Arg Arg Gln Arg
 65 70

<210> 3047
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 3047

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 120
 ttgggttagt caggaattca gtttatggat gagccagaaa tggcagtgtt tctgcagaat
 180
 gccaaaaccc tgctaaaaaa aatctcgaa gcatcaaagg catttcagat ggagaaaata
 240
 gaacatggct atgagaacat gaaccacttc acagtcaacc tcaatagaga agaaaagata
 300
 atacgtgaaa ttgactttta cagagaagat gaagatgaag aagaagaaga aggccggagaa
 360
 ggagaaaaaag aagagaagga gaagtgggag a
 391

<210> 3048
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 3048
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 Arg Ala Leu Ile Lys Lys Tyr Ser Asp His Leu Glu Asn Val Ser Lys
 20 25 30
 Leu Val Glu Ser Gly Ile Gln Phe Met Asp Glu Pro Glu Met Ala Val
 35 40 45
 Phe Leu Gln Asn Ala Lys Thr Leu Leu Lys Ile Ser Glu Ala Ser
 50 55 60
 Lys Ala Phe Gln Met Glu Lys Ile Glu His Gly Tyr Glu Asn Met Asn
 65 70 75 80
 His Phe Thr Val Asn Leu Asn Arg Glu Glu Lys Ile Ile Arg Glu Ile
 85 90 95
 Asp Phe Tyr Arg Glu Asp Glu Asp Glu Glu Glu Gly Gly Glu
 100 105 110
 Gly Glu Lys Glu Glu Lys Glu Lys Trp Glu
 115 120

<210> 3049
 <211> 599
 <212> DNA
 <213> Homo sapiens

<400> 3049
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 300

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 420
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 480
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 599

<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

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									25				30	Tyr
Thr	Ile	Lys	Glu	Glu	Lys	Ser	Ile	Leu	Tyr	Leu	Glu	Gly	Ser	Ala
									40			45		Leu
Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu	Ile	Ala	Phe	Tyr	Cys	Val	Ser
									55			60		Arg
Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg	Leu	Pro	Gln	Ala	Ile	Leu	Glu
65									70			75		80
Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr	Ile	Ala	Asn	Leu	Gly	Leu	Gly
								85			90		95	Phe
Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro	Gln	Glu	Arg	Gly	Lys	Pro	Ala
								100			105		110	Glu
Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly	Phe	Pro	Leu	Val	Ser	Ser	Leu
								115			120		125	Arg
Pro	Thr	Ala	His	Asp	Ala	Asn	Cys	Ala	Cys	Glu	Ile	Glu	Leu	Ser
								130			135		140	Val
Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val	Asn	Pro	Ile	Phe	Ile	Glu	Asp
145								150			155		160	Cys
Ser	Ser	Ala	Leu	Pro	Thr	Asp	Gln	Pro	Pro	Leu	Gly	Asn	Cys	Pro
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Arg

<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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 120
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 180

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 240
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 300
 agtcctcttt agatgaaccc tatgagaagg tcaagaagcg ctccctctcac agccattcca
 360
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 420
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 480
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 780
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<210> 3052

<211> 62

<212> PRT

<213> Homo sapiens

<400> 3052

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<210> 3053

<211> 2625

<212> DNA

<213> Homo sapiens

<400> 3053

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 <212> PRT
 <213> Homo sapiens

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 Gly Ile Ser Leu Asn Ile Pro Ala Pro Gln Pro Val Cys Ile Ser Glu
 85 90 95
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 Glu Lys Glu Phe Val Glu Lys His Phe Asn Asp Leu Asn Met Lys Ala
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 Val Glu Gln Asp Glu Pro Ile Pro Gln Lys Pro Gln Ser Ala Phe Tyr
 130 135 140
 Tyr Cys Arg Leu Leu Leu Ser Ile Leu Gly Met Asn Ser Trp Asp Lys
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 Arg Arg Ser Phe His Leu Leu Lys Lys Asn Glu Lys Leu Leu Arg Glu
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 Leu Arg Asn Leu Asp Ser Arg Gln Cys Arg Glu Thr His Lys Ile Ala

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Asn Thr Gly Gly Ser Gln Ala Tyr Glu Asp Phe Val Ala Gly Leu Gly		
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Trp Glu Val Asn Leu Thr Asn His Cys Gly Phe Met Gly Gly Leu Gln		
225	230	235
Lys Asn Lys Ser Thr Gly Leu Thr Thr Pro Tyr Phe Ala Thr Ser Thr		
245	250	255
Val Glu Val Ile Phe His Val Ser Thr Arg Met Pro Ser Asp Ser Asp		
260	265	270
Asp Ser Leu Thr Lys Lys Leu Arg His Leu Gly Asn Asp Glu Val His		
275	280	285
Ile Val Trp Ser Glu His Thr Arg Asp Tyr Arg Arg Gly Ile Ile Pro		
290	295	300
Thr Glu Phe Gly Asp Val Leu Ile Val Ile Tyr Pro Met Lys Asn His		
305	310	315
Met Phe Ser Ile Gln Ile Met Lys Lys Pro Glu Val Pro Phe Phe Gly		
325	330	335
Pro Leu Phe Asp Gly Ala Ile Val Asn Gly Lys Val Leu Pro Ile Met		
340	345	350
Val Arg Ala Thr Ala Ile Asn Ala Ser Arg Ala Leu Lys Ser Leu Ile		
355	360	365
Pro Leu Tyr Gln Asn Phe Tyr Glu Glu Arg Ala Arg Tyr Leu Gln Thr		
370	375	380
Ile Val Gln His His Leu Glu Pro Thr Thr Phe Glu Asp Phe Ala Ala		
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<210> 3055

<211> 905

<212> DNA

<213> Homo sapiens

<400> 3055

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<210> 3056
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 <212> PRT
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<400> 3056
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 35 40 45
 Ser Glu His Gly Thr Thr Val Asp Asn Val Leu Tyr Ser Cys Asp Phe
 50 55 60
 Ser Glu Lys Thr Pro Pro Thr Pro Pro Ser Ser Ile Val Ala Lys Val
 65 70 75 80
 Gln Ser Val Ile Arg Arg Arg Arg His Gln Lys Gln Asp Glu Glu Pro
 85 90 95
 Ser Glu Glu Ala Ala Met Met Ser Ser Gln Ala Gln Gly Pro Gln Arg
 100 105 110
 Arg Pro Cys Asn Cys Lys Ala Ser Ser Ser Ser Leu Ile Gly Gly Ser
 115 120 125
 Gly Ala Gly Trp Glu Gly Thr Ala Leu Leu His His Gly Ser Tyr Ile
 130 135 140
 Lys Leu Gly Cys Leu Gln Phe Val Phe Ser Ile Thr Glu Phe Ala Thr
 145 150 155 160
 Lys Gln Pro Lys Gly Asp Ala Ser Leu Leu Gln Asp Gly Val Leu Ala
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 Ser Val Pro
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<210> 3057
 <211> 2169
 <212> DNA
 <213> Homo sapiens

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 <211> 298
 <212> PRT
 <213> Homo sapiens

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 Asn Thr Pro Ala Leu Leu Ala Pro Gln Ala Gly Ala Arg Glu Lys Val
 50 55 60
 Ala Arg Ser Trp Tyr Cys Asn Arg Gly Leu Val Ser Leu Ser Ala Lys
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 Ile Asp Arg Lys Gly Tyr Thr Pro Gly Glu Val Ile Pro Val Phe Ala
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 Glu Ile Asp Asn Gly Ser Thr Arg Pro Val Leu Pro Arg Ala Ala Val
 100 105 110
 Val Gln Thr Gln Thr Phe Met Ala Arg Gly Ala Arg Lys Gln Lys Arg
 115 120 125
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 Ala Leu Trp Gln Gly Arg Ala Leu Arg Ile Pro Pro Val Gly Pro Ser
 145 150 155 160
 Ile Leu His Cys Arg Val Leu His Val Asp Tyr Ala Leu Lys Val Cys
 165 170 175
 Val Asp Ile Pro Gly Thr Ser Lys Leu Leu Leu Glu Leu Pro Leu Val
 180 185 190
 Ile Gly Thr Ile Pro Leu His Pro Phe Gly Ser Arg Ser Ser Val

195	200	205
Gly Ser His Ala Ser Phe Leu Leu Asp Trp Arg	Gly Ala Leu Pro	
210	215	220
Glu Arg Pro Glu Ala Pro Pro Glu Tyr Ser Glu Val Val Ala Asp Thr		
225	230	235
Glu Glu Ala Ala Leu Gly Gln Ser Pro Phe Pro Leu Pro Gln Asp Pro		
245	250	255
Asp Met Ser Leu Glu Gly Pro Phe Phe Ala Tyr Ile Gln Glu Phe Arg		
260	265	270
Tyr Arg Pro Pro Pro Leu Tyr Ser Glu Glu Asp Pro Asn Pro Leu Leu		
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<210> 3059

<211> 1411

<212> DNA

<213> Homo sapiens

<400> 3059

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<210> 3060
<211> 334
<212> PRT
<213> Homo sapiens

<400> 3060
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 50 55 60
 Arg Arg Arg His Arg Ser Ser Ser Ser Ser Tyr Gly Ser Arg Arg
 65 70 75 80
 Lys Arg Ser Arg Ser Arg Ser Arg Gly Arg Gly Lys Ser Tyr Arg Val
 85 90 95
 Gln Arg Ser Arg Ser Lys Ser Arg Thr Arg Arg Ser Arg Ser Arg Pro
 100 105 110
 Arg Leu Arg Ser His Ser Arg Ser Ser Glu Arg Ser Ser His Arg Arg
 115 120 125
 Thr Arg Ser Arg Ser Arg Asp Arg Glu Arg Arg Lys Gly Arg Asp Lys
 130 135 140
 Glu Lys Arg Glu Lys Glu Lys Asp Lys Gly Lys Asp Lys Glu Leu His
 145 150 155 160
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 165 170 175
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 180 185 190
 Ala Ala Ala Lys Ala Asp Glu Ala Leu Lys Ala Lys Glu Arg Asn Glu
 195 200 205
 Glu Glu Ala Lys Arg Arg Lys Glu Glu Asp Gln Ala Thr Leu Val Glu
 210 215 220
 Gln Val Lys Arg Val Lys Glu Ile Glu Ala Ile Glu Ser Asp Ser Phe
 225 230 235 240
 Val Gln Gln Thr Phe Arg Ser Ser Lys Glu Val Lys Lys Ser Val Glu
 245 250 255
 Pro Ser Glu Val Lys Gln Ala Thr Ser Thr Ser Gly Pro Ala Ser Ala

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Pro	Thr	Ala	Ile	Lys	Tyr	Gln	Asp	Asp	Asn	Ser	Leu	Ala	His	Pro	Asn
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Leu	Phe	Ile	Glu	Lys	Ala	Asp	Ala	Glu	Glu	Lys	Trp	Phe	Lys	Arg	Leu
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<210> 3061

<211> 1554

<212> DNA

<213> Homo sapiens

<400> 3061

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 1554

<210> 3062
 <211> 146
 <212> PRT
 <213> Homo sapiens

<400> 3062
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 20 25 30
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 35 40 45
 Gly Gly Thr Pro Ala Phe Leu Pro Ser Ser Leu Ser Pro Gln Ser Ser
 50 55 60
 Leu Pro Ala Ser Arg Ala Leu Ala Thr Pro Pro Lys Leu His Thr Cys
 65 70 75 80
 Glu Lys Cys Ser Thr Ser Ile Ala Asn Gln Ala Val Arg Ile Gln Glu
 85 90 95
 Gly Arg Tyr Arg His Pro Gly Cys Tyr Thr Cys Ala Asp Cys Gly Leu
 100 105 110
 Asn Leu Lys Met Arg Gly His Phe Trp Val Gly Asp Glu Leu Tyr Cys
 115 120 125
 Glu Lys His Ala Arg Gln Arg Tyr Ser Ala Pro Ala Thr Leu Ser Ser
 130 135 140
 Arg Ala
 145

<210> 3063
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 3063
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 120
 ttacactcca gggatctgca ctccatgata gtggcagctt ttcagtgtct ctgtgtctgg
 180

ctgacagagc accctgatat gcttgatcaa aaggactacc ttaaggaagt actggagatt
 240
 gtgaaactgg gatatctcagg aagtaagtcc aagaacaatg agcaagaggt caagtacaaa
 300
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 360
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 386

<210> 3064
<211> 128
<212> PRT
<213> Homo sapiens

<400> 3064
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 20 25 30
 Tyr Gln Cys Ser Arg Pro Ala Pro Leu His Ser Arg Asp Leu His Ser
 35 40 45
 Met Ile Val Ala Ala Phe Gln Cys Leu Cys Val Trp Leu Thr Glu His
 50 55 60
 Pro Asp Met Leu Asp Glu Lys Asp Tyr Leu Lys Glu Val Leu Glu Ile
 65 70 75 80
 Val Glu Leu Gly Ile Ser Gly Ser Lys Ser Lys Asn Asn Glu Gln Glu
 85 90 95
 Val Lys Tyr Lys Gly Asp Lys Glu Pro Asn Pro Ala Ser Met Arg Val
 100 105 110
 Lys Asp Ala Ala Glu Ala Thr Leu Thr Trp Tyr Gly Ser Asp Arg Thr
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<210> 3065
<211> 2104
<212> DNA
<213> Homo sapiens

<400> 3065
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 360
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 420
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720
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780
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900
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960
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1020
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1320
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1560
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1680
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1860
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1920
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1980
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2100

tgca
2104

<210> 3066

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3066

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							20					25			30
Leu	Gln	Gly	Glu	His	Ser	Gln	Asn	Gly	Glu	Glu	Glu	Pro	Glu	Thr	Glu
							35					40			45
Pro	Val	Gly	Glu	Glu	Ser	Ile	Ser	Asp	Ala	Glu	Lys	Val	Ala	Met	Xaa
							50					55			60
Ser	Gln	Gly	Pro	Xaa	Thr	Ala	Pro	Gly	Ser	Pro	Cys	Arg	Ser	Cys	Gly
65								70				75			80
Thr	Cys	Cys	Thr	Arg	Gly	Thr	Xaa	Leu	Lys	Ser	Lys	Val	Phe	Leu	Leu
							85					90			95
Gln	Glu	Glu	Leu	Ala	Tyr	Tyr	Lys	Ser	Glu	Glu	Met	Glu	Glu	Asn	
							100					105			110
Arg	Ile	Pro	Gln	Pro	Pro	Ile	Ala	His	Pro	Arg	Thr	Ser	Pro	Gln	
							115					120			125
Pro	Glu	Ser	Gly	Ile	Lys	Arg	Leu	Phe	Ser	Phe	Phe	Ser	Arg	Asp	Lys
							130					135			140
Lys	Arg	Leu	Ala	Asn	Thr	Gln	Arg	Asn	Val	His	Ile	Gln	Glu	Ser	Phe
145								150				155			160
Gly	Gln	Trp	Ala	Asn	Thr	His	Arg	Asp	Asp	Gly	Tyr	Thr	Glu	Gln	Gly
							165					170			175
Gln	Glu	Ala	Leu	Gln	His	Leu									
							180								

<210> 3067

<211> 645

<212> DNA

<213> Homo sapiens

<400> 3067

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120					
tccnnagttc	tagtccatca	agcacggag	ccgactgcgg	gctcaccacc	ctgttctcta
180					
ccccgacctg	acttgcagcc	cccgccaca	cctccccgc	ccgttcacaa	ggagcaaaaa
240					
aagtcatgacc	caccccccacc	cccaccagga	aaattcaagt	ctttcctccc	accgcggagc
300					
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360					
ccggccatgc	ctcgtccacc	ttcgggagcc	ggcgacaggg	agatccccag	ggatctcgcg
420					

tgtgcgcctt acccaccctt gggggcagga cgggggagcg agcaccgatc ggccgcgggg
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 540
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<210> 3068

<211> 204

<212> PRT

<213> Homo sapiens

<400> 3068

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				20				25			30			
Ser	Pro	Asn	Arg	Ala	Gln	Gly	Pro	Ser	Xaa	Val	Leu	Val	His	Gln
				35				40			45			
Arg	Glu	Pro	Thr	Ala	Gly	Ser	Pro	Pro	Cys	Ser	Leu	Pro	Arg	Pro
	50				55						60			
Leu	Gln	Pro	Pro	Ser	Thr	Pro	Pro	Pro	Pro	Val	His	Lys	Glu	Gln
65					70					75		80		
Lys	Ser	Asp	Pro	Pro	Pro	Pro	Pro	Pro	Gly	Lys	Phe	Lys	Ser	Phe
										85	90	95		
Pro	Pro	Arg	Ser	Pro	Gly	Asn	Ser	Ala	Leu	Gly	Pro	Arg	Arg	Gly
		100							105			110		
Gly	Trp	Ile	Ala	Ala	Gly	Gly	Ala	Pro	Ala	Met	Pro	Arg	Pro	Ser
		115						120			125			
Gly	Ala	Gly	Asp	Arg	Glu	Ile	Pro	Arg	Asp	Leu	Ala	Cys	Ala	Pro
		130			135					140				
Pro	Pro	Pro	Gly	Ala	Gly	Arg	Gly	Ser	Glu	His	Arg	Ser	Ala	Pro
145						150				155		160		
Arg	Arg	Cys	Gly	Ser	Lys	Glu	Pro	Glu	Ala	Ala	Ala	Ser	Arg	Pro
						165				170		175		
Ser	Pro	Ala	Glu	Glu	Glu	Pro	Pro	Pro	Val	Ser	Ala	Glu	Glu	Thr
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Pro	Ser	Pro	Ala	Pro	Pro	Pro	Arg	Gly	Glu	Trp	Gly			
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<210> 3069

<211> 1561

<212> DNA

<213> Homo sapiens

<400> 3069

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120					
gaaaaggta	tatttgttagg	tggatgcaag	tatattggag	aaatatttct	atcaaaatca
180					

ctggtttgt taggagtatt ttgatTTTC tatTTTACG ctggaaaaaa aattaaaaca
240
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300
aattacagCT gTTtatCttG caactttaAG attaattAAA tgcaaATGta actCTGTGAA
360
tcatggaaAT acCTGCCAGA CCTCTTATTa ATACCTTCAC ttaaaACCCC CTGTGCCTGA
420
gagtCATTAA tttgCTAAAA gaaaAGTGCT aaAGCAGCCC tttgCCCACA aacaATTCTG
480
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540
tgaggacaca agaaggCTCC gatgataACC tggCACCTA ggtAGAAACC cagCCAAGTG
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tgagCgtttG aagCTGcAGT ttggCTGCCA TCGTGTcGGC gaaaAGAAAG aattcaggCA
660
ccatgtcATC cAGTACAAGA gataAAAACG gattCAACCG gaaATTCAAT gtggCACCAc
720
atATGGATA catgAGTGCg gTTATACAAc aggCCACATA ttttttttGA acAGTCTCCT
780
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840
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960
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1020
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1080
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1140
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1260
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1561

<210> 3070
<211> 153
<212> PRT
<213> Homo sapiens

<400> 3070

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Leu Gly Ser Ser Val Leu His Trp Gly Tyr Leu Pro Ser Lys Asp Asp			
35	40	45	
Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys			
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His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys			
65	70	75	80
Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala			
85	90	95	
Glu Tyr Leu Tyr Ser Thr Pro Glu Gln Leu Ser Lys Arg Leu Gln Asn			
100	105	110	
Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu			
115	120	125	
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Leu Thr Thr Glu Pro Arg Glu Asp Leu			
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<210> 3071

<211> 3343

<212> DNA

<213> Homo sapiens

<400> 3071

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<210> 3072
 <211> 349
 <212> PRT
 <213> Homo sapiens

<400> 3072
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 35 40 45
 Gly Ala Gln Ala Pro Gly Arg Ala His Arg Cys Ala His Cys Arg Arg
 50 55 60
 His Phe Pro Gly Trp Val Ala Leu Trp Leu His Thr Arg Arg Cys Gln
 65 70 75 80
 Ala Arg Leu Pro Leu Pro Cys Pro Glu Cys Gly Arg Arg Phe Arg His
 85 90 95
 Ala Pro Phe Leu Ala Leu His Arg Gln Val His Ala Ala Ala Thr Pro
 100 105 110
 Asp Leu Gly Phe Ala Cys His Leu Cys Gly Gln Ser Phe Arg Gly Trp

115	120	125
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130	135	140
Ile Ala Cys Pro Lys Cys Glu Arg Arg Phe Trp Arg Arg Lys Gln Leu		
145	150	155
Arg Ala His Leu Arg Arg Cys His Pro Pro Ala Pro Glu Ala Arg Pro		
165	170	175
Phe Ile Cys Gly Asn Cys Gly Arg Ser Phe Ala Gln Trp Asp Gln Leu		
180	185	190
Val Ala His Lys Arg Val His Val Ala Glu Ala Leu Glu Glu Ala Ala		
195	200	205
Ala Lys Ala Leu Gly Pro Arg Pro Arg Gly Arg Pro Ala Val Thr Ala		
210	215	220
Pro Arg Pro Gly Gly Asp Ala Val Asp Arg Pro Phe Gln Cys Ala Cys		
225	230	235
Cys Gly Lys Arg Phe Arg His Lys Pro Asn Leu Ile Ala His Arg Arg		
245	250	255
Val His Thr Gly Glu Arg Pro His Gln Cys Pro Glu Cys Gly Lys Arg		
260	265	270
Phe Thr Asn Lys Pro Tyr Leu Thr Ser His Arg Arg Ile His Thr Gly		
275	280	285
Glu Lys Pro Tyr Pro Cys Lys Glu Cys Gly Arg Arg Phe Arg His Lys		
290	295	300
Pro Asn Leu Leu Ser His Ser Lys Ile His Xaa Ser Asp Pro Arg Gly		
305	310	315
Arg Pro Arg Pro Pro Ala Arg Gly Ala Pro Ser Cys Gln Pro Ala		
325	330	335
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<210> 3073

<211> 791

<212> DNA

<213> Homo sapiens

<400> 3073

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<210> 3074

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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							20		25				30			
Ser	Cys	Glu	Phe	Leu	Leu	Ala	Gly	Ala	Gly	Gly	Ala	Gly	Ala			
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Lys	Arg	Ile	Ile	Ser	Asp	Leu	Cys	Lys	Leu	Tyr	Asn	Leu	Pro	Gln	His	
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Pro	Asp	Val	Glu	Met	Leu	Asp	Gln	Pro	Leu	Pro	Ala	Glu	Gln	Cys	Thr	
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Thr	Glu	Asp	Leu	Asp	His	Tyr	Glu	Met	Lys	Glu	Glu	Glu	Pro	Ala	Glu	
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Ser	Asn	Ser	Trp	Asn	Asp	Ser	Leu	Tyr	Gly	Trp	Asp	Val	Gln	Leu	Leu	
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Lys	Val	Asp	Gln	Gly	Ser	Val										
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<210> 3075

<211> 603

<212> DNA

<213> Homo sapiens

<400> 3075

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<210> 3076

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3076

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				20				25				30				
Val	Gly	Pro	Gln	Lys	Val	Leu	Gly	Gly								
				35				40				45				
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					85				90				95			
Leu	Ile	Gln	Leu	Tyr	Asp	Ala	Phe	Glu	Ser	Ser	Ser	Phe	Thr	Leu		
					100			105				110				
Ile	Met	Glu	Tyr	Val	Asp	Gly	Gly	Glu	Leu	Phe	Asp	Arg	Ile	Thr	Asp	
					115			120				125				
Glu	Lys	Tyr	His	Leu	Thr	Glu	Leu	Asp	Val	Val	Leu	Phe	Thr	Arg	Gln	
					130			135				140				
Ile	Cys	Glu	Gly	Val	His	Tyr	Leu	His	Gln	His	Tyr	Ile	Leu	His	Leu	
				145			150			155			160			
Asp	Leu	Lys	Pro	Glu	Asn	Ile	Leu	Cys	Val	Ser	Gln	Thr	Gly	His	Gln	

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Ile Lys Ile Ile Asp Phe Gly Leu Ala Arg Arg Tyr Lys Pro Arg Glu			
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Lys Leu Lys Val Asn Phe Gly Thr Pro			
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<210> 3077
<211> 1377
<212> DNA
<213> Homo sapiens

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<210> 3078

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3078

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Pro Leu Leu Leu Met Pro Glu Glu Ala Arg Leu Leu Ala Glu Ile Gly
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Ala Val Thr Leu Val Ser Ala Pro Arg Pro Asp Ser Arg His His Ser
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Leu Ala Leu Thr Ser Phe Lys Arg Gln Gln Glu Glu Ser Phe Gln Glu
 85 90 95

Gln Ser Ala Leu Ala Ala Glu Ala Arg Glu Thr Arg Arg Gln Glu Leu
 100 105 110

Leu Glu Lys Ile Thr Glu Gly Gln Ala Ala Lys Lys Gln Lys Leu Glu
 115 120 125

Gln Ala Ser Gly Ala Ser Ser Ser Gln Glu Ala Gly Ser Ser Gln Ala
 130 135 140

Ala Lys Glu Asp Glu Thr Ser Asp Gly Gln Ala Ser Gly Glu Gln Glu
 145 150 155 160

Glu Ala Gly Pro Ser Ser Ser Gln Ala Gly Pro Ser Asn Gly Val Ala
 165 170 175

Pro Leu Pro Arg Ser Ala Leu Leu Val Gln Leu Ala Thr Ala Arg Pro
 180 185 190

Arg Pro Val Lys Ala Arg Pro Leu Asp Trp Arg Val Gln Ser Lys Asp
 195 200 205

Trp Pro His Ala Gly Arg Pro Ala His Glu Leu Arg Tyr Ser Ile Tyr
 210 215 220

Arg Asp Leu Trp Glu Arg Gly Phe Phe Leu Ser Ala Ala Gly Lys Phe
 225 230 235 240

Gly Gly Asp Phe Leu Val Tyr Pro Gly Asp Pro Leu Arg Phe His Ala
 245 250 255

His Tyr Ile Ala Gln Cys Trp Ala Pro Glu Asp Thr Ile Pro Leu Gln
 260 265 270

Asp Leu Val Ala Ala Gly Arg Leu Gly Thr Ser Val Arg Lys Thr Leu
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Gln Trp Ala Ser Leu Gln
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<210> 3079

<211> 1785

<212> DNA

<213> Homo sapiens

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<210> 3080

<211> 500

<212> PRT

<213> Homo sapiens

<400> 3080

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Val	Ser	Gln	Val	Gln	Pro	Pro	Pro	Ser	Lys	Ala	Ser	Ala	Pro	Glu	Pro
							35		40				45		
Pro	Ala	Glu	Glu	Glu	Val	Ala	Thr	Gly	Thr	Thr	Ser	Ala	Ser	Asp	Asp
							50		55				60		
Leu	Glu	Ala	Leu	Gly	Thr	Leu	Ser	Leu	Gly	Thr	Thr	Glu	Glu	Lys	Ala
							65		70				75		80
Ala	Ala	Glu	Ala	Ala	Val	Pro	Arg	Thr	Ile	Gly	Ala	Glu	Leu	Met	Glu
							85		90				95		
Leu	Val	Arg	Arg	Asn	Thr	Gly	Leu	Ser	His	Glu	Leu	Cys	Arg	Val	Ala
							100		105				110		
Ile	Gly	Ile	Ile	Val	Gly	His	Ile	Gln	Ala	Ser	Val	Pro	Ala	Ser	Ser
							115		120				125		
Pro	Val	Met	Glu	Gln	Val	Leu	Leu	Ser	Leu	Val	Glu	Gly	Lys	Asp	Leu
							130		135				140		
Ser	Met	Ala	Leu	Pro	Ser	Gly	Gln	Val	Cys	His	Asp	Gln	Gln	Arg	Leu
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Glu	Val	Ile	Phe	Ala	Asp	Leu	Ala	Arg	Arg	Lys	Asp	Asp	Ala	Gln	Gln
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							180		185				190		
Glu	Glu	Leu	Leu	His	Ile	Leu	Thr	Asp	Ala	Asp	Pro	Glu	Val	Cys	Lys
							195		200				205		
Lys	Met	Cys	Lys	Arg	Asn	Glu	Phe	Glu	Ser	Val	Leu	Ala	Leu	Val	Ala
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							225		230				235		240
Cys	Phe	Gly	Ala	Met	Cys	Ser	Leu	Asp	Ala	Ala	Ile	Ile	Ser	Thr	Leu
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Phe		
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<210> 3081

<211> 1902

<212> DNA

<213> Homo sapiens

<400> 3081

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<210> 3082

<211> 414

<212> PRT

<213> Homo sapiens

<400> 3082

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Cys His Asp Asp Ala Ala Lys Phe Val His Leu Leu Met Ser Pro Gly		
50	55	60
Cys Asn Tyr Leu Val Gln Glu Asp Phe Val Pro Phe Leu Gln Asp Val		
65	70	75
Val Asn Thr His Pro Gly Leu Ser Phe Leu Lys Glu Ala Ser Glu Phe		
85	90	95
His Ser Arg Tyr Ile Thr Thr Val Ile Gln Arg Ile Phe Tyr Ala Val		
100	105	110
Asn Arg Ser Trp Ser Gly Arg Ile Thr Cys Ala Glu Leu Arg Arg Ser		
115	120	125
Ser Phe Leu Gln Asn Val Ala Leu Leu Glu Glu Ala Asp Ile Asn		
130	135	140
Gln Leu Thr Glu Phe Phe Ser Tyr Glu His Phe Tyr Val Ile Tyr Cys		
145	150	155
Lys Phe Trp Glu Leu Asp Thr Asp His Asp Leu Leu Ile Asp Ala Asp		
165	170	175
Asp Leu Ala Arg His Asn Asp His Ala Leu Ser Thr Lys Met Ile Asp		
180	185	190
Arg Ile Phe Ser Gly Ala Val Thr Arg Gly Arg Lys Val Gln Lys Glu		
195	200	205
Gly Lys Ile Ser Tyr Ala Asp Phe Val Trp Phe Leu Ile Ser Glu Glu		
210	215	220
Asp Lys Lys Thr Pro Thr Ser Ile Glu Tyr Trp Phe Arg Cys Met Asp		
225	230	235
Leu Asp Gly Asp Gly Ala Leu Ser Met Phe Glu Leu Glu Tyr Phe Tyr		
245	250	255
Glu Glu Gln Cys Arg Arg Leu Asp Ser Met Ala Ile Glu Ala Leu Pro		
260	265	270
Phe Gln Asp Cys Leu Cys Gln Met Leu Asp Leu Val Lys Pro Arg Thr		
275	280	285
Glu Gly Lys Ile Thr Leu Gln Asp Leu Lys Arg Cys Lys Leu Ala Asn		
290	295	300
Val Phe Phe Asp Thr Phe Phe Asn Ile Glu Lys Tyr Leu Asp His Glu		
305	310	315
Gln Lys Glu Gln Ile Ser Leu Leu Arg Asp Gly Asp Ser Gly Gly Pro		
325	330	335
Glu Leu Ser Asp Trp Glu Lys Tyr Ala Ala Glu Glu Tyr Asp Ile Leu		
340	345	350
Val Ala Glu Glu Thr Val Gly Glu Pro Trp Glu Asp Gly Phe Glu Ala		
355	360	365
Glu Leu Ser Pro Val Glu Gln Lys Leu Ser Ala Leu Arg Ser Pro Leu		
370	375	380
Ala Gln Arg Pro Phe Phe Glu Ala Pro Ser Pro Leu Gly Ala Val Asp		
385	390	395
Leu Tyr Glu Tyr Ala Cys Gly Asp Glu Asp Leu Glu Pro Leu		
405	410	

<210> 3083

<211> 610

<212> DNA

<213> Homo sapiens

<400> 3083
 ngccggccca gctgctggga acctgtcagg ccctcggtt ccagtcacct gagctggcac
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 120
 gactgggcag gccgggccccg ggcactggtg ggtgacagtc atacttcgtg gagcccagcg
 180
 240
 agcatcccg gcaagcacta ccaggctgtg ggtctgcacc tctgaaaggta agagaagcgg
 300
 cgggtcaatc tgccctagggt cctgtccatg ccccccgtgg ctggcaccgc gtgccatgca
 360
 tacgaccggg aggtccaccc tcgttgcagg ctctcaccgg gctactaccc ggctgtcccc
 420
 agcacccccc tgaaggacgc gccaggggag ttccctgcctc gagtcttctc taccggcga
 480
 gtctccctta ggtgagagga accgcgcagt gctgctggct ctccgaggcc acaggccctt
 540
 ccaaggcagg atttgggcac ttccctctg tggttggcag gtgtccatgt gggaaactgag
 600
 gcccacccggaa acctgctgcc agcgccctcc catgtttgtc ttcttggcag cgccatcagg
 660
 gcagtggcca
 610

<210> 3084
<211> 144
<212> PRT
<213> Homo sapiens

<400> 3084
 Xaa Arg Pro Ser Cys Trp Glu Pro Val Arg Pro Ser Gly Ser Ser His
 1 5 10 15
 Leu Ser Trp His Arg Gly Pro Pro Cys Glu Val Tyr Ile Ala Val Leu
 20 25 30
 Gln Arg Ser Arg Leu His Ala Ala Asp Trp Ala Gly Arg Ala Arg Ala
 35 40 45
 Leu Val Gly Asp Ser His Thr Ser Trp Ser Pro Ala Ser Ile Pro Gly
 50 55 60
 Lys His Tyr Gln Ala Val Gly Leu His Leu Trp Lys Val Glu Lys Arg
 65 70 75 80
 Arg Val Asn Leu Pro Arg Val Leu Ser Met Pro Pro Val Ala Gly Thr
 85 90 95
 Ala Cys His Ala Tyr Asp Arg Glu Val His Leu Arg Cys Glu Leu Ser
 100 105 110
 Pro Gly Tyr Tyr Leu Ala Val Pro Ser Thr Phe Leu Lys Asp Ala Pro
 115 120 125
 Gly Glu Phe Leu Leu Arg Val Phe Ser Thr Gly Arg Val Ser Leu Arg
 130 135 140

<210> 3085
<211> 1080
<212> DNA
<213> Homo sapiens

<400> 3085
nntgtgcgga ggaggagttc catcattacg gtcttcatt agataaaatat ccccaactta
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cttctccaat aagaagataat tcagatattt tagtaccccg cttgttaatg gcagccattt
120
caaaagataa gaaaatggaa attaaggaa atctgttcag caacaaagat cttgaggaat
180
tatgcagaca tatcaacaac agaaaccaag cagcacagca ttctcagaag cagtctactg
240
agctcttcca gtgcattgtac ttcaaagaca aagaccctgc caccgaggag cgttgcataat
300
ctgacggagt tatttattca attagaacaa atgggtgtgct tctatttata ccaaggtttg
360
ggattaaagg tgctgcttat ctaaaaaata aagatggttt agtcatctca tgtggcccag
420
atacgcttcc tgaatggaaa ccaggatccc ttcaacgatt tcaaaacaaa attacctcta
480
ctacaacaga tggggaatct gttacgttcc atttgtttga ccatgttaacc gtaagaataat
540
ccatacaggc ctcacgttgc cattctgata caatcagact taaaataatt agtaacaaac
600
catacaagat accaaataca gaacttattc atcagagttc ccccttgctg aagagtgagt
660
tagtgaaaga agtaactaaa tctgtgaaag aagctcagct tgcccaagaa gtcaaagtaa
720
acatcattca ggaggaatat caagaatatac gccaaacaaa gggaggagc ctatacacac
780
ttcttagagga gatacgggac ctagctctcc tggatgttcc aaacaattat ggaatatgag
840
aggctcttac ttcaactaaga gctgtcatat gtgaatgttt tacagtcttt tcaaacttaa
900
catattaatgt gtgtcaactca gtgctcttagt cgatcaggac tggtagctta tttcgcatat
960
atgtanaatg ttctcagccg ggcacggtgg ctcacgcctg taaccccagc actttggag
1020
gctgaggccgg gcggatcactg aggtcaggag attgagacca tccctggctaa cacggtgaaa
1080

<210> 3086

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3086

Met	Cys	Val	Thr	Gln	Cys	Ser	Ser	Arg	Ser	Gly	Leu	Gly	Ser	Tyr	Phe	
1						5								10		15
Ala	Tyr	Met	Xaa	Asn	Val	Leu	Ser	Arg	Ala	Arg	Trp	Leu	Thr	Pro	Val	
							20							25		30
Thr	Pro	Ala	Leu	Trp	Glu	Ala	Glu	Ala	Gly	Gly	Ser	Arg	Gly	Gln	Glu	
							35							40		45
Ile	Glu	Thr	Ile	Leu	Ala	Asn	Thr	Val	Lys							
							50							55		

<210> 3087

<211> 2329

<212> DNA

<213> Homo sapiens

<400> 3087

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cgagagaggg agcaactgtga cacggaggga gaggctgacg actttgatcc tgggaagaag
120
gtggaggtgg agccgcccccc agatcggcca gtccgagcgt gccggacaca gcagccggaa
180
atggagcgca cccatattca gcaactcctg gaacacttcc tccgccagct tcagagaaaa
240
gatccccatg gatTTTTCgc ttttcctgtc acggatgcaa ttgctcctgg atattcaatg
300
ataataaaac atcccatttga ttttggcacc atgaaagaca aaattgttagc taatgaatac
360
aagtcaGttta cggaaatttaa ggcagatttc aagctgatgt gtgataatgc aatgacatac
420
aataggccag ataccgtgttca ctacaagtttgc gcgaagaaga tccttcacgc aggctttaag
480
atgatgagca aacaggcagc tctttgggc aatgaagata cagctgttga ggaacctgtc
540
cctgaagtttgc taccagtaca agtagaaact gccaagaaat ccaaaaagcc gagtagagaa
600
gttatcagct gcatgttttgc gcctgaaggg aatgcctgca gcttgacgga cagtaccgca
660
gaggagcacg tgctggcgct ggtggagcac gcagctgacg aagctcggga caggatcaac
720
cggttcctcc caggcggcaa gatgggcattt ctgaagagga acggggacgg gagcctgctc
780
tacagcgtgg tcaacacggc cgagccgaac gctgatgagg aggagaccca cccgggtgact
840
tgagctcgct ctccagtaag ctactcccag gcttcaccac gctgggcttc aaagacgaga
900
gaagaaacaa agtcacccctt ctctccagtg ccactactgc gctttcgatg cagaataatt
960
cagtatttgg cgacttgaag tcggacgaga tggagctgtct ctactcagcc tacggagatg
1020
agacaggcgt gcagtgtgcg ctgagcctgc aggagtttgt gaaggatgtct gggagctaca
1080
gcaagaaagt ggtggacgac ctctggacc agatcacagg cggagaccac tctaggacgc
1140
tcttcagct gaagcagaga agaaatgttc ccatgaagcc tccagatgaa gccaaaggttg
1200
gggacacccctt aggagacagc agcagctctg ttctggatgtt catgtcgatg aagtccatc
1260
ccgacgttttc tgtggatatc tccatgctca gctctctggg gaaggtgaag aaggagctgg
1320
accctgacga cagccatttg aacttggatg agacgacgaa gctcctgcag gacctgcacg
1380
aagcacaggc ggagcgccggc ggctctcgcc cgtcgatccaa cctcagctcc ctgtccaaacg
1440

cctccgagag ggaccagcac cacctggaa gcccttctcg cctgagtgtc gggagcagc
 1500
 cagacgtcac ccacgacccc tatgagtttc ttcaagtctcc agagcctgcg gcctctgcca
 1560
 agacctaact ctagaccacc ttcaagctttt ttattttatt ttttttagttt tattttgcac
 1620
 gtgttagagtt tttgtcatca gacaaggact ttgatcctgt cccctttggc atgcggaaag
 1680
 cagccgcggg gaggtaatga attgtctgtg gtatcatgtc agcagagtct ccaagccccca
 1740
 1800
 cgaaccctga ggagtggagt catacgcgaa ggcataatgg ccatacggtc agcagagaga
 1860
 gtctctgtac acagccccgt gaaccctgag gagtggagtc atacacgaag ggcgtgtggc
 1920
 catcggtca gcagagagag tctctgtaca cagccccgtg aaccctgagg agtggagtca
 1980
 tacgcgaagg gtgtgtggcc aggctgcaga gctgcgtgcc gtttgttgc gagoatcacf
 2040
 tgtggctcca gcccttgaaa ctgccagtgt agacacctct gtctgccccca ctgtcctggg
 2100
 gtcgccttgc ggagggcacag gcatgggtgt gtctggcctc attctgtatc agtccagtgt
 2160
 gttccctgtca tagtttgtgt ctcccaggca ggcataatggta ggggcctcgc agggggccatt
 2220
 ggggagcaca gggccaggct ggggtgagga gagctccct gttttctgtt taattgtga
 2280
 gcctggaaaa ggagtgtgtt ctgcctgccc gttacagtgg agcgttccgt gtccataaaaa
 2329

<210> 3088
 <211> 280
 <212> PRT
 <213> Homo sapiens

<400> 3088
 Xaa Glu Lys His Leu Asp Asp Glu Glu Arg Arg Lys Arg Glu Glu
 1 5 10 15
 Lys Lys Arg Lys Arg Glu Arg Glu His Cys Asp Thr Glu Gly Glu Ala
 20 25 30
 Asp Asp Phe Asp Pro Gly Lys Lys Val Glu Val Glu Pro Pro Pro Asp
 35 40 45
 Arg Pro Val Arg Ala Cys Arg Thr Gln Gln Pro Glu Met Glu Arg Thr
 50 55 60
 His Ile Gln Gln Leu Leu Glu His Phe Leu Arg Gln Leu Gln Arg Lys
 65 70 75 80
 Asp Pro His Gly Phe Phe Ala Phe Pro Val Thr Asp Ala Ile Ala Pro
 85 90 95
 Gly Tyr Ser Met Ile Ile Lys His Pro Met Asp Phe Gly Thr Met Lys
 100 105 110
 Asp Lys Ile Val Ala Asn Glu Tyr Lys Ser Val Thr Glu Phe Lys Ala
 115 120 125
 Asp Phe Lys Leu Met Cys Asp Asn Ala Met Thr Tyr Asn Arg Pro Asp

130	135	140
Thr Val Tyr Tyr Lys Leu Ala Lys Lys Ile Leu His Ala Gly Phe Lys		
145	150	155
Met Met Ser Lys Gln Ala Ala Leu Leu Gly Asn Glu Asp Thr Ala Val		160
165	170	175
Glu Glu Pro Val Pro Glu Val Val Pro Val Gln Val Glu Thr Ala Lys		
180	185	190
Lys Ser Lys Lys Pro Ser Arg Glu Val Ile Ser Cys Met Phe Glu Pro		
195	200	205
Glu Gly Asn Ala Cys Ser Leu Thr Asp Ser Thr Ala Glu Glu His Val		
210	215	220
Leu Ala Leu Val Glu His Ala Ala Asp Glu Ala Arg Asp Arg Ile Asn		
225	230	235
Arg Phe Leu Pro Gly Gly Lys Met Gly Tyr Leu Lys Arg Asn Gly Asp		240
245	250	255
Gly Ser Leu Leu Tyr Ser Val Val Asn Thr Ala Glu Pro Asn Ala Asp		
260	265	270
Glu Glu Glu Thr His Pro Val Thr		
275	280	

<210> 3089

<211> 722

<212> DNA

<213> Homo sapiens

<400> 3089

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 ggagacgtgc tggacacact ggaggcgctg gggataaaag gaccattgtt agaagagcaa
 120
 gccc ttacaa aggccgcaga gggtgattt tcttcacctg aatttcaga gctctgtatt
 180
 tggtaggct ctcaaataaa atcattatgc aacttggaaag aaagtatcac gtctgctggg
 240
 agagatgacc tagagagctt ccagcttgag ataagtgggt tttaaaaga gatggcctgt
 300
 ccatactcg tactcgtotc aggagacatt aaagagcgcc tcacaaagaa ggatgactgc
 360
 ttgaaacttc tttttttt aagtacagaa cttcaagctt tacaaatatt acagaacaag
 420
 aaacataaaaa attctcaatt agataaaaat agtgaagttt atcaggaagt tcaagctatg
 480
 tttgatacac ttggataacc caagtcaaca acttctgaca ttccgcataat gctaaaccaa
 540
 gtggaatcaa aggtgaaaga tattctctca aaggccaga aaaatcatgt gggaaaacca
 600
 ctactgaaaa tggattaaa ttcagaacag gcggaaacaac tggaaagaat caatgatgt
 660
 ctttcctgtg aatatgagtg ccgccgacga atgttaatga aacgattaga tgtgactgta
 720
 ca
 722

<210> 3090

<211> 240
<212> PRT
<213> Homo sapiens

<400> 3090
Xaa Ala Leu Asp Gln Ala Thr Met Arg Gly Pro Glu Leu Gly Pro Glu
1 5 10 15
Thr Ser Met Glu Gly Asp Val Leu Asp Thr Leu Glu Ala Leu Gly Tyr
20 25 30
Lys Gly Pro Leu Leu Glu Glu Gln Ala Leu Thr Lys Ala Ala Glu Gly
35 40 45
Gly Leu Ser Ser Pro Glu Phe Ser Glu Leu Cys Ile Trp Leu Gly Ser
50 55 60
Gln Ile Lys Ser Leu Cys Asn Leu Glu Glu Ser Ile Thr Ser Ala Gly
65 70 75 80
Arg Asp Asp Leu Glu Ser Phe Gln Leu Glu Ile Ser Gly Phe Leu Lys
85 90 95
Glu Met Ala Cys Pro Tyr Ser Val Leu Val Ser Gly Asp Ile Lys Glu
100 105 110
Arg Leu Thr Lys Lys Asp Asp Cys Leu Lys Leu Leu Leu Phe Leu Ser
115 120 125
Thr Glu Leu Gln Ala Leu Gln Ile Leu Gln Asn Lys Lys His Lys Asn
130 135 140
Ser Gln Leu Asp Lys Asn Ser Glu Val Tyr Gln Glu Val Gln Ala Met
145 150 155 160
Phe Asp Thr Leu Gly Ile Pro Lys Ser Thr Thr Ser Asp Ile Pro His
165 170 175
Met Leu Asn Gln Val Glu Ser Lys Val Lys Asp Ile Leu Ser Lys Val
180 185 190
Gln Lys Asn His Val Gly Lys Pro Leu Leu Lys Met Asp Leu Asn Ser
195 200 205
Glu Gln Ala Glu Gln Leu Glu Arg Ile Asn Asp Ala Leu Ser Cys Glu
210 215 220
Tyr Glu Cys Arg Arg Arg Met Leu Met Lys Arg Leu Asp Val Thr Val
225 230 235 240

<210> 3091
<211> 333
<212> DNA
<213> Homo sapiens

<400> 3091
acgcgtgaag gggcgagg ggaaggaagc cctgggagc agctgctcac cccttgcca
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caccatcttgcgttgcagg ggtctggac tgacagggag cacccaggc ctttgttacc
120
cccaggcgca ccccttcgtc caagtgtccc aaaatgattt ctaaatgcct ggctccccca
180
ctctttgact ccatctttgcgttgcctt tctgctgcca gctcccccgatcttccctg
240
gggactcctt tttgtgtccc cttctccccc tgccctact gccaggcaga tccccctttc
300
ttccataaccc atccctgcct ccctgctcgcc
333

<210> 3092
<211> 104
<212> PRT
<213> Homo sapiens

<400> 3092
Met Gly Met Glu Glu Lys Gly Ile Cys Leu Ala Val Gly Ala Gly Glu
1 5 10 15
Lys Gly Asp Thr Lys Arg Ser Pro Gln Gly Arg Val Gly Gly Ala Gly
20 25 30
Ser Arg Lys Arg Glu Pro Arg Asp Gly Val Lys Glu Trp Gly Ser Gln
35 40 45
Ala Phe Ser Asn His Phe Gly Thr Leu Gly Arg Arg Gly Arg Pro Gly
50 55 60
Gly Thr Lys Gly Leu Gly Cys Ser Leu Ser Val Pro Asp Pro Cys Gln
65 70 75 80
Ala Lys Met Val Trp Gln Arg Gly Glu Gln Leu Leu Pro Arg Ala Ser
85 90 95
Phe Pro Ser Ala Pro Phe Thr Arg
100

<210> 3093
<211> 720
<212> DNA
<213> Homo sapiens

<400> 3093
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120
agggggcagc ctgtgggcag tgactctgtc tgtctttgga caggacaagg actgccatcc
180
accatggtga agctggctg cagcttctct gggaaagccag gtaaaagaccc tggggaccag
240
gatggggctg ccatggacag tgtgcctctg atcagccccct tggacatcag ccagctccag
300
ccgccactcc ctgaccaggt ggtcatcaag acacagacag aataccagct gtcctccccca
360
gaccagcaga atttccctga cctggagggc cagaggctga actgcagcca cccagaggaa
420
gggcgcaggc tgccccaccgc acggatgatc gccttcgcca tggcgctact gggctgcgtg
480
ctgatcatgt acaaggccat ctggtacgac cagttcacct gccccgacgg cttctgctg
540
cggcacaaga tctgcacgcc gctgaccctg gagatgtact acacggagat ggaccccgag
600
cgccaccgca gcatcctggc ggccatcggt gcctacccgc tgagccgcaa gcacggcacg
660
gagacgcggc cggcctgggg ggacggctac cgccgagcca aggaggagcg caaggggccc
720

<210> 3094

<211> 179
 <212> PRT
 <213> Homo sapiens

<400> 3094
 Met Val Lys Leu Gly Cys Ser Phe Ser Gly Lys Pro Gly Lys Asp Pro
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 Gly Asp Gln Asp Gly Ala Ala Met Asp Ser Val Pro Leu Ile Ser Pro
 20 25 30
 Leu Asp Ile Ser Gln Leu Gln Pro Pro Leu Pro Asp Gln Val Val Ile
 35 40 45
 Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser Pro Asp Gln Gln Asn Phe
 50 55 60
 Pro Asp Leu Glu Gly Gln Arg Leu Asn Cys Ser His Pro Glu Glu Gly
 65 70 75 80
 Arg Arg Leu Pro Thr Ala Arg Met Ile Ala Phe Ala Met Ala Leu Leu
 85 90 95
 Gly Cys Val Leu Ile Met Tyr Lys Ala Ile Trp Tyr Asp Gln Phe Thr
 100 105 110
 Cys Pro Asp Gly Phe Leu Leu Arg His Lys Ile Cys Thr Pro Leu Thr
 115 120 125
 Leu Glu Met Tyr Tyr Thr Glu Met Asp Pro Glu Arg His Arg Ser Ile
 130 135 140
 Leu Ala Ala Ile Gly Ala Tyr Pro Leu Ser Arg Lys His Gly Thr Glu
 145 150 155 160
 Thr Pro Ala Ala Trp Gly Asp Gly Tyr Arg Ala Ala Lys Glu Glu Arg
 165 170 175
 Lys Gly Pro

<210> 3095
 <211> 519
 <212> DNA
 <213> Homo sapiens

<400> 3095
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 60
 agaccccccagc agcaggcctc agctcatgtg actcggccct ctaagaggcc cagcaagata
 120
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 180
 ctcgcctcgc tctggagat ggagatctct gggagggtgg tggatgctgt ggatggctgg
 240
 atgctcaaca gcagtgccat caggaacctc ggcgttagacc tgctcccgaa ctaccaggac
 300
 ccttactcgg gccgcactct gaccaagggc gaggtggct gcttcttcag ccattactcc
 360
 atctggaaag agcgagcagt acaaggcaca cttctggcca cgggacctgg tggccttctc
 420
 cggccagccc ctgtcgctg cccctaccca ctagccggg gacgcccagt ggctcagtga
 480
 cacggagaca tcctctccat gggatgatgc cagcggccg
 519

<210> 3096

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3096

Gly Gly Ile Ser Pro Ala His Ser Cys Thr His Ser Gly Ala His Cys
 1 5 10 15
 Thr Arg Gly Arg Arg Pro Gln Gln Gln Ala Ser Ala His Val Thr Arg
 20 25 30
 Pro Ser Lys Arg Pro Ser Lys Ile Gly Phe Asp Glu Val Phe Val Ile
 35 40 45
 Ser Leu Ala Arg Arg Pro Asp Arg Arg Glu Arg Met Leu Ala Ser Leu
 50 55 60
 Trp Glu Met Glu Ile Ser Gly Arg Val Val Asp Ala Val Asp Gly Trp
 65 70 75 80
 Met Leu Asn Ser Ser Ala Ile Arg Asn Leu Gly Val Asp Leu Leu Pro
 85 90 95
 Gly Tyr Gln Asp Pro Tyr Ser Gly Arg Thr Leu Thr Lys Gly Glu Val
 100 105 110
 Gly Cys Phe Leu Ser His Tyr Ser Ile Trp Glu Glu Arg Ala Val Gln
 115 120 125
 Gly Thr Leu Leu Ala Thr Gly Pro Gly Gly Leu Leu Arg Pro Ala Pro
 130 135 140
 Ala Arg Cys Pro Tyr Pro Leu Cys Arg Gly Arg Arg Val Ala Gln
 145 150 155

<210> 3097

<211> 4953

<212> DNA

<213> Homo sapiens

<400> 3097

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 120
 ggcgggaggg gcggcctgag ggccggacggg cgggcggcccg ggttgcgggg gtcgggtgcc
 180
 gctccgcact gcccggccgg tctcgccccc ggcccattga gtggccgcgg cggcggaggg
 240
 ggctcggcgc ccagtcgctt cgccgactac ttgtcatct gccgactgga cacggagacc
 300
 gggctggagc cggacgagct gtcggcatta tgccagtaca tacaggcttc taaagccagg
 360
 gatggtgcca gccctttcat ttcaagtacg actgaaggag aaaatttta gcagacacca
 420
 ttgagaagaa cattcaaatac taaggtcctt gcacgatatac ctgagaacgt agaatggaat
 480
 ccctttgacc aagatgcagt aggaatgcta tgtatgccga aagggttgtgc attcaagacc
 540
 caggctgatc ccagggagcc ccaattccat gcctttatta tcacaaggga ggtatggctct
 600

cggacatgg ggttgcct cacatttat gaagaggta ctagcaagca gatctgcagt
660
gcaatgcaga ccctctacca catgcacaat gctgagtatg atgtcctaca tgctccccct
720
gctgatgaca gagaccagag cagcatggag gatggtaag acactcctgt gaccaaactg
780
cagcgcttca actcctatga cattagccgg gacactctct acgtctctaa gtgcacatgc
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960
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1020
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1080
gtttttgaac tgctcggtt ggagaatgtg tttagcttt ttacttgtgc cttctggag
1140
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1200
acagctctca tgtttccattt ccagtggcag catgtctatg tccctattct cccagcttct
1260
ctcctgcatt tccttagatgc tcctgttcca tacctgatgg gtttgcattc caatggcctg
1320
gatgaccggc caaaagctgga gctgcctcaa gaggctaacc tctgcttgtt ggacattgac
1380
aaccacctca ttgagttgcc agaggacttgc ccacagttcc ccaacaaatt ggagttgtc
1440
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1560
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1620
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<211> 1359
<212> PRT
<213> Homo sapiens

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35 40 45
Asp Gly Arg Ala Pro Gly Leu Arg Gly Leu Gly Ala Ala Pro His Cys
50 55 60
Pro Ala Gly Leu Gly Pro Gly Ala Met Ser Gly Gly Gly Gly Gly

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Gly Ser Ala Pro Ser Arg Phe Ala Asp Tyr	Phe Val Ile Cys Gly Leu		
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Asp Thr Glu Thr Gly Leu Glu Pro Asp Glu	Leu Ser Ala Leu Cys Gln		
100	105	110	
Tyr Ile Gln Ala Ser Lys Ala Arg Asp Gly	Ala Ser Pro Phe Ile Ser		
115	120	125	
Ser Thr Thr Glu Gly Glu Asn Phe Glu Gln	Thr Pro Leu Arg Arg Thr		
130	135	140	
Phe Lys Ser Lys Val Leu Ala Arg Tyr Pro	Glu Asn Val Glu Trp Asn		
145	150	155	160
Pro Phe Asp Gln Asp Ala Val Gly Met	Leu Cys Met Pro Lys Gly Leu		
165	170	175	
Ala Phe Lys Thr Gln Ala Asp Pro Arg Glu	Pro Gln Phe His Ala Phe		
180	185	190	
Ile Ile Thr Arg Glu Asp Gly Ser Arg Thr	Phe Gly Phe Ala Leu Thr		
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Phe Tyr Glu Glu Val Thr Ser Lys Gln Ile	Cys Ser Ala Met Gln Thr		
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Leu Tyr His Met His Asn Ala Glu Tyr Asp	Val Leu His Ala Pro Pro		
225	230	235	240
Ala Asp Asp Arg Asp Gln Ser Ser Met	Glu Asp Gly Glu Asp Thr Pro		
245	250	255	
Val Thr Lys Leu Gln Arg Phe Asn Ser	Tyr Asp Ile Ser Arg Asp Thr		
260	265	270	
Leu Tyr Val Ser Lys Cys Ile Cys Leu	Ile Thr Pro Met Ser Phe Met		
275	280	285	
Lys Ala Cys Arg Ser Val Pro Gly Gln	Leu His Gln Ala Val Thr Ser		
290	295	300	
Pro Gln Pro Pro Pro Leu Pro Leu Glu	Ser Tyr Ile Tyr Asn Val Leu		
305	310	315	320
Tyr Glu Val Pro Leu Pro Pro Gly Arg	Ser Leu Lys Phe Ser Gly		
325	330	335	
Val Tyr Trp Pro Ile Ile Cys Gln Arg	Pro Ser Thr Asn Glu Leu Pro		
340	345	350	
Leu Phe Asp Phe Pro Val Lys Glu Val	Phe Leu Leu Gly Val Glu		
355	360	365	
Asn Val Phe Gln Leu Phe Thr Cys Ala	Leu Leu Glu Phe Gln Ile Leu		
370	375	380	
Leu Tyr Ser Gln His Tyr Gln Arg Leu	Met Thr Val Ala Glu Thr Ile		
385	390	395	400
Thr Ala Leu Met Phe Pro Phe Gln	Trp Gln His Val Tyr Val Pro Ile		
405	410	415	
Leu Pro Ala Ser Leu Leu His Phe	Leu Asp Ala Pro Val Pro Tyr Leu		
420	425	430	
Met Gly Leu His Ser Asn Gly Leu Asp	Asp Arg Ser Lys Leu Glu Leu		
435	440	445	
Pro Gln Glu Ala Asn Leu Cys Phe Val	Asp Ile Asp Asn His Phe Ile		
450	455	460	
Glu Leu Pro Glu Asp Leu Pro Gln Phe	Pro Asn Lys Leu Glu Phe Val		
465	470	475	480
Gln Glu Val Ser Glu Ile Leu Met Ala	Phe Gly Ile Pro Pro Glu Gly		
485	490	495	
Asn Leu His Cys Ser Glu Ser Ala Ser	Lys Leu Lys Arg Leu Arg Ala		

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Ser Glu Leu Val Ser Asp Lys Arg Asn Gly Asn Ile Ala Gly Ser Pro		
515	520	525
Leu His Ser Tyr Glu Leu Leu Lys Glu Asn Glu Thr Ile Ala Arg Leu		
530	535	540
Gln Ala Leu Val Lys Arg Thr Gly Val Ser Leu Glu Lys Leu Glu Val		
545	550	555
Arg Glu Asp Pro Ser Ser Asn Lys Asp Leu Lys Val Gln Cys Asp Glu		
565	570	575
Glu Glu Leu Arg Ile Tyr Gln Leu Asn Ile Gln Ile Arg Glu Val Phe		
580	585	590
Ala Asn Arg Phe Thr Gln Met Phe Ala Asp Tyr Glu Val Phe Val Ile		
595	600	605
Gln Pro Ser Gln Asp Lys Glu Ser Trp Phe Thr Asn Arg Glu Gln Met		
610	615	620
Gln Asn Phe Asp Lys Ala Ser Phe Leu Ser Asp Gln Pro Glu Pro Tyr		
625	630	635
Leu Pro Phe Leu Ser Arg Phe Leu Glu Thr Gln Met Phe Ala Phe Phe		
645	650	655
Ile Asp Asn Lys Ile Met Cys His Asp Asp Asp Lys Asp Pro Val		
660	665	670
Leu Arg Val Phe Asp Ser Arg Val Asp Lys Ile Arg Leu Leu Asn Val		
675	680	685
Arg Thr Pro Thr Leu Arg Thr Ser Met Tyr Gln Lys Cys Thr Thr Val		
690	695	700
Asp Glu Ala Glu Lys Ala Ile Glu Leu Arg Leu Ala Lys Ile Asp His		
705	710	715
Thr Ala Ile His Pro His Leu Leu Asp Met Lys Ile Gly Gln Gly Lys		
725	730	735
Tyr Glu Pro Gly Phe Pro Lys Leu Gln Ser Asp Val Leu Cys Thr		
740	745	750
Gly Pro Ala Ser Asn Lys Trp Thr Lys Arg Asn Ala Pro Ala Gln Trp		
755	760	765
Arg Arg Lys Asp Arg Gln Lys Gln His Thr Glu His Leu Arg Leu Asp		
770	775	780
Asn Asp Gln Arg Glu Lys Tyr Ile Gln Glu Ala Arg Thr Met Gly Ser		
785	790	795
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Thr Ile Arg Gln Pro Lys Leu Ser Asn Leu Ser Pro Ser Val Ile Ala		
805	810	815
Gln Thr Asn Trp Lys Phe Val Glu Gly Leu Leu Lys Glu Cys Arg Asn		
820	825	830
Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly Arg Glu Ala Val Glu		
835	840	845
Leu Gly His Gly Glu Val Asn Ile Thr Gly Val Glu Glu Asn Thr Leu		
850	855	860
Ile Ala Ser Leu Cys Asp Leu Leu Glu Arg Ile Trp Ser His Gly Leu		
865	870	875
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Gln Val Lys Gln Gly Lys Ser Ala Leu Trp Ser His Leu Leu His Tyr		
885	890	895
Gln Asp Asn Arg Gln Arg Lys Leu Thr Ser Gly Ser Leu Ser Thr Ser		
900	905	910
Gly Ile Leu Leu Asp Ser Glu Arg Arg Lys Ser Asp Ala Ser Ser Leu		
915	920	925
Met Pro Pro Leu Arg Ile Ser Leu Ile Gln Asp Met Arg His Ile Gln		

930	935	940
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Arg Leu Ser Met Glu Lys Lys Leu Leu Ser Arg His Leu Lys Gln Leu		960
965	970	975
Leu Ser Asp His Glu Leu Thr Lys Lys Leu Tyr Lys Arg Tyr Ala Phe		
980	985	990
Leu Arg Cys Asp Asp Glu Lys Glu Gln Phe Leu Tyr His Leu Leu Ser		
995	1000	1005
Phe Asn Ala Val Asp Tyr Phe Cys Phe Thr Asn Val Phe Thr Thr Ile		
1010	1015	1020
Leu Ile Pro Tyr His Ile Leu Ile Val Pro Ser Lys Lys Leu Gly Gly		
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Ser Met Phe Thr Ala Asn Pro Trp Ile Cys Ile Ser Gly Glu Leu Gly		1040
1045	1050	1055
Glu Thr Gln Ile Met Gln Ile Pro Arg Asn Val Leu Glu Met Thr Phe		
1060	1065	1070
Glu Cys Gln Asn Leu Gly Lys Leu Thr Thr Val Gln Ile Gly His Asp		
1075	1080	1085
Asn Ser Gly Leu Tyr Ala Lys Trp Leu Val Glu Tyr Val Met Val Arg		
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Asn Glu Ile Thr Gly His Thr Tyr Lys Phe Pro Cys Gly Arg Trp Leu		
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Gly Lys Gly Met Asp Asp Gly Ser Leu Glu Arg Ile Leu Val Gly Glu		1120
1125	1130	1135
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Pro Asn Asn Lys Pro Lys Leu Asn Thr Gly Gln Ile Gln Glu Ser Ile		
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Gly Glu Ala Val Asn Gly Ile Val Lys His Phe His Lys Pro Glu Lys		
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Glu Arg Gly Ser Leu Thr Leu Leu Cys Gly Glu Cys Gly Leu Val		1200
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Ser Ala Leu Glu Gln Ala Phe Gln His Gly Phe Lys Ser Pro Arg Leu		
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Phe Lys Asn Val Phe Ile Trp Asp Phe Leu Glu Lys Ala Gln Thr Tyr		
1235	1240	1245
Tyr Glu Thr Leu Glu Lys Asn Glu Val Val Pro Glu Glu Asn Trp His		
1250	1255	1260
Thr Arg Ala Arg Asn Phe Cys Arg Phe Val Thr Ala Ile Asn Asn Thr		
1265	1270	1275
Pro Arg Asn Ile Gly Lys Asp Gly Lys Phe Gln Met Leu Val Cys Leu		1280
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Gly Ala Arg Asp His Leu Leu His His Trp Ile Ala Leu Leu Ala Asp		
1300	1305	1310
Cys Pro Ile Thr Ala His Met Tyr Glu Asp Val Ala Leu Ile Lys Asp		
1315	1320	1325
His Thr Leu Val Asn Ser Leu Ile Arg Val Leu Gln Thr Leu Gln Glu		
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 <212> DNA
 <213> Homo sapiens

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<210> 3100
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 Gly Lys Ile Met Cys Lys Ile Thr Ser Ala Leu Tyr Thr Leu Asn Phe

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Ala Val Thr Lys Val Pro Ser Gln Ser Gly Val Gly Lys Pro Cys Trp		80
85	90	95
Ile Ile Cys Phe Cys Val Trp Met Ala Ala Ile Leu Leu Ser Ile Pro		
100	105	110
Gln Leu Val Phe Tyr Thr Val Asn Asp Asn Ala Arg Cys Ile Pro Ile		
115	120	125
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<211> 2623

<212> DNA

<213> Homo sapiens

<400> 3101

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<210> 3102

<211> 410

<212> PRT

<213> Homo sapiens

<400> 3102

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Lys	Lys	Tyr	Tyr	Phe	Pro	Val	Arg	Glu	Leu	Glu	Arg	Ser	Leu	Arg	Phe
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Ser	Cys	Gly	Leu	His	Ala	Asp	Trp	Thr	Glu	Leu	Thr	Asn	Cys	Val	Pro
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															160
Gly	Val	Leu	Asp	Arg	Arg	Asp	Ser	Ala	Ala	Leu	Arg	Thr	Pro	Arg	Lys
															165
															170
															175
Phe	Tyr	Tyr	Ile	Thr	Leu	Leu	Arg	Asp	Pro	Val	Ser	Arg	Tyr	Leu	Ser
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															185
															190
Glu	Trp	Arg	His	Val	Gln	Arg	Gly	Ala	Thr	Trp	Lys	Thr	Ser	Leu	His
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															200
															205
Met	Cys	Asp	Gly	Arg	Thr	Pro	Thr	Pro	Glu	Glu	Leu	Pro	Pro	Cys	Tyr
															210
															215
															220
Glu	Gly	Thr	Asp	Trp	Ser	Gly	Cys	Thr	Leu	Gln	Glu	Phe	Met	Asp	Cys
225															230
															235
															240
Pro	Tyr	Asn	Leu	Ala	Asn	Asn	Arg	Gln	Val	Arg	Met	Leu	Ala	Asp	Leu
															245
															250
															255
Ser	Leu	Val	Gly	Cys	Tyr	Asn	Leu	Ser	Ile	Pro	Glu	Gly	Lys	Arg	
															260
															265
															270
Ala	Gln	Leu	Leu	Leu	Glu	Ser	Ala	Lys	Lys	Asn	Leu	Arg	Gly	Met	Ala
															275
															280
															285
Phe	Phe	Gly	Leu	Thr	Glu	Phe	Gln	Arg	Lys	Thr	Gln	Tyr	Leu	Phe	Glu
															290
															295
															300
Arg	Thr	Phe	Asn	Leu	Lys	Phe	Ile	Arg	Pro	Phe	Met	Gln	Tyr	Asn	Ser
305															310
															315
															320
Thr	Arg	Ala	Gly	Gly	Val	Glu	Val	Asp	Glu	Asp	Thr	Ile	Arg	Arg	Ile
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															330
															335
Glu	Glu	Leu	Asn	Asp	Leu	Asp	Met	Gln	Leu	Tyr	Asp	Tyr	Ala	Lys	Asp
															340
															345
															350
Leu	Phe	Gln	Gln	Arg	Tyr	Gln	Tyr	Lys	Arg	Gln	Leu	Glu	Arg	Arg	Glu
															355
															360
															365
Gln	Arg	Leu	Arg	Ser	Arg	Glu	Glu	Arg	Leu	Leu	His	Arg	Ala	Lys	Glu

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Ala Leu Pro Arg Glu Asp Ala Asp Glu Pro Gly Arg Val Pro Thr Glu		
385	390	395
Asp Tyr Met Ser His Ile Ile Glu Lys Trp		400
405		410

<210> 3103
<211> 1228
<212> DNA
<213> Homo sapiens

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120
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180
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240
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300
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360
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420
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480
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540
cctcggttgc cgcacccgtc tgattcctta tgatgtttag ggtgccgggg tctgggtct
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660
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720
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780
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900
aagtccctt agagcacagg aaagtgtcgc ttcaagggtcga agaagggaga gaaagcagct
960
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1080
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1228

<210> 3104
<211> 144
<212> PRT
<213> Homo sapiens

<400> 3104
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20 25 30
Pro Gly Gly Arg Leu Arg Thr Arg Arg Pro Ala Thr Ile Leu Ser Val
35 40 45
Ala Ala Ala Trp Gln Arg Ala Ser Leu Gly Gln Trp Xaa Arg Arg Pro
50 55 60
Val Ala Ala Leu Ala Pro Tyr Ser Asp Ser Leu Val Glu Pro Leu Val
65 70 75 80
Cys Arg Leu Gln Val Leu Phe Leu Lys Lys Ala Gly Ser Glu Arg Pro
85 90 95
Cys Glu Thr Thr Pro Gly Ala Lys Gly Asp Ser His Lys Thr Gln Val
100 105 110
Leu Leu Glu His Arg Lys Val Ser Leu Gln Val Glu Glu Gly Arg Glu
115 120 125
Ser Ser Phe Pro His Leu His Gly Cys Leu Val Ala Arg Ile Arg Cys
130 135 140

<210> 3105
<211> 4924
<212> DNA
<213> Homo sapiens

<400> 3105
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120
cggagcgaga agcccgata gacgccccgg cggccccggg tcctggagtc cccgcgcctg
180
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240
gacagggatt acccgccagca tgaaccccg ccggcgggca gcctcctgta cagccgcgg
300
ccctgcaga gcgcgcgtgc gcactgcgg tactggaaaca ctttctcgct gccgcatac
360
cctgccttct ccagcgacag cggcccgatgc atgagctccg ctccttcct cggcagccag
420
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600
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660

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720
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 aacc
 4924

<210> 3106
 <211> 1366
 <212> PRT
 <213> Homo sapiens

<400> 3106
 Met Leu Ala Val Gly Pro Ala Met Asp Arg Asp Tyr Pro Gln His Glu
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 20 25 30
 Ala Met Leu His Cys Pro Tyr Trp Asn Thr Phe Ser Leu Pro Pro Tyr
 35 40 45
 Pro Ala Phe Ser Ser Asp Ser Arg Pro Phe Met Ser Ser Ala Ser Phe
 50 55 60
 Leu Gly Ser Gln Pro Cys Pro Asp Thr Ser Tyr Ala Pro Val Ala Thr
 65 70 75 80
 Ala Ser Ser Leu Pro Pro Lys Thr Cys Asp Phe Ala Gln Asp Ser Ser

85	90	95
Tyr Phe Glu Asp Phe Ser Asn Ile Ser Ile Phe Ser Ser Ser Val Asp		
100	105	110
Ser Leu Ser Asp Ile Val Asp Thr Pro Asp Phe Leu Pro Ala Asp Ser		
115	120	125
Leu Asn Gln Val Ser Thr Ile Trp Asp Asp Asn Pro Ala Pro Ser Thr		
130	135	140
His Asp Lys Leu Phe Gln Leu Ser Arg Pro Phe Ala Gly Phe Glu Asp		
145	150	155
Phe Leu Pro Ser His Ser Thr Pro Leu Leu Val Ser Tyr Gln Glu Gln		
165	170	175
Ser Val Gln Ser Gln Pro Glu Glu Asp Glu Ala Glu Glu Glu Glu		
180	185	190
Ala Glu Glu Leu Gly His Thr Glu Thr Tyr Ala Asp Tyr Val Pro Ser		
195	200	205
Lys Ser Lys Ile Gly Lys Gln His Pro Asp Arg Val Val Glu Thr Ser		
210	215	220
Thr Leu Ser Ser Val Pro Pro Asp Ile Thr Tyr Thr Leu Ala Leu		
225	230	235
Pro Ser Asp Ser Gly Ala Leu Ser Ala Leu Gln Leu Glu Ala Ile Thr		
245	250	255
Tyr Ala Cys Gln Gln His Glu Val Leu Leu Pro Ser Gly Gln Arg Ala		
260	265	270
Gly Phe Leu Ile Gly Asp Gly Ala Gly Val Gly Lys Gly Arg Thr Val		
275	280	285
Ala Gly Val Ile Leu Glu Asn His Leu Arg Gly Arg Lys Lys Ala Leu		
290	295	300
Trp Phe Ser Val Ser Asn Asp Leu Lys Tyr Asp Ala Glu Arg Asp Leu		
305	310	315
Arg Asp Ile Glu Ala Thr Gly Ile Ala Val His Ala Leu Ser Lys Ile		
325	330	335
Lys Tyr Gly Asp Thr Thr Ser Glu Gly Val Leu Phe Ala Thr Tyr		
340	345	350
Ser Ala Leu Ile Gly Glu Ser Gln Ala Gly Gly Gln His Arg Thr Arg		
355	360	365
Leu Arg Gln Ile Leu Asp Trp Cys Gly Glu Ala Phe Glu Gly Val Ile		
370	375	380
Val Phe Asp Glu Cys His Lys Ala Lys Asn Ala Gly Ser Thr Lys Met		
385	390	395
Gly Lys Ala Val Leu Asp Leu Gln Asn Lys Leu Pro Leu Ala Arg Val		
405	410	415
Val Tyr Ala Ser Ala Thr Gly Thr Ser Glu Pro Arg Asn Met Ile Tyr		
420	425	430
Met Ser Arg Leu Gly Ile Trp Gly Glu Gly Thr Pro Phe Arg Asn Phe		
435	440	445
Glu Glu Phe Leu His Ala Ile Glu Lys Arg Gly Val Gly Ala Met Glu		
450	455	460
Ile Val Ala Met Asp Met Lys Val Ser Gly Met Tyr Ile Ala Arg Gln		
465	470	475
Leu Ser Phe Ser Gly Val Thr Phe Arg Ile Glu Glu Ile Pro Leu Ala		
485	490	495
Pro Ala Phe Glu Cys Val Tyr Asn Arg Ala Ala Leu Leu Trp Ala Glu		
500	505	510
Ala Leu Asn Val Phe Gln Gln Ala Ala Asp Trp Ile Gly Leu Glu Ser		

515	520	525
Arg Lys Ser Leu Trp Gly Gln Phe Trp Ser Ala His Gln Arg Phe Phe		
530	535	540
Lys Tyr Leu Cys Ile Ala Ala Lys Val Arg Arg Leu Val Glu Leu Ala		
545	550	555
Arg Glu Glu Leu Ala Arg Asp Lys Cys Val Val Ile Gly Leu Gln Ser		
565	570	575
Thr Gly Glu Ala Arg Thr Arg Glu Val Leu Gly Glu Asn Asp Gly His		
580	585	590
Leu Asn Cys Phe Val Ser Ala Ala Glu Gly Val Phe Leu Ser Leu Ile		
595	600	605
Gln Lys His Phe Pro Ser Thr Lys Arg Lys Arg Asp Arg Gly Ala Gly		
610	615	620
Ser Lys Arg Lys Arg Arg Pro Arg Gly Arg Gly Ala Lys Ala Pro Arg		
625	630	635
640		
Leu Ala Cys Glu Thr Ala Gly Val Ile Arg Ile Ser Asp Asp Ser Ser		
645	650	655
Thr Glu Ser Asp Pro Gly Leu Asp Ser Asp Phe Asn Ser Ser Pro Glu		
660	665	670
Ser Leu Val Asp Asp Asp Val Val Ile Val Asp Ala Val Gly Leu Pro		
675	680	685
Ser Asp Asp Arg Gly Ser Leu Cys Leu Leu Gln Arg Asp Pro His Gly		
690	695	700
Pro Gly Val Leu Glu Arg Val Glu Arg Leu Lys Gln Asp Leu Leu Asp		
705	710	715
720		
Lys Val Arg Arg Leu Gly Arg Glu Leu Pro Val Asn Thr Leu Asp Glu		
725	730	735
Leu Ile Asp Gln Leu Gly Gly Pro Gln Arg Val Ala Glu Met Thr Gly		
740	745	750
Arg Lys Gly Arg Val Val Ser Arg Pro Asp Gly Thr Val Ala Phe Glu		
755	760	765
Ser Arg Ala Glu Gln Gly Leu Ser Ile Asp His Val Asn Leu Arg Glu		
770	775	780
Lys Gln Arg Phe Met Ser Gly Glu Lys Leu Val Ala Ile Ile Ser Glu		
785	790	795
800		
Ala Ser Ser Ser Gly Val Ser Leu Gln Ala Asp Arg Arg Val Gln Asn		
805	810	815
Gln Arg Arg Arg Val His Met Thr Leu Glu Leu Pro Trp Ser Ala Asp		
820	825	830
Arg Ala Ile Gln Gln Phe Gly Arg Thr His Arg Ser Asn Gln Val Ser		
835	840	845
Ala Pro Glu Tyr Val Phe Leu Ile Ser Glu Leu Ala Gly Glu Arg Arg		
850	855	860
Phe Ala Ser Ile Val Ala Lys Arg Leu Glu Ser Leu Gly Ala Leu Thr		
865	870	875
880		
His Gly Asp Arg Arg Ala Thr Glu Ser Arg Asp Leu Ser Lys Tyr Asn		
885	890	895
Phe Glu Asn Lys Tyr Gly Thr Arg Ala Leu His Cys Val Leu Thr Thr		
900	905	910
Ile Leu Ser Gln Thr Glu Asn Lys Val Pro Val Pro Gln Gly Tyr Pro		
915	920	925
Gly Gly Val Pro Thr Phe Phe Arg Asp Met Lys Gln Gly Leu Leu Ser		
930	935	940
Val Gly Ile Gly Gly Arg Glu Ser Arg Asn Gly Cys Leu Asp Val Glu		

945	950	955	960
Lys Asp Cys Ser Ile Thr Lys Phe Leu Asn Arg Ile Leu Gly Leu Glu			
965	970	975	
Val His Lys Gln Asn Ala Leu Phe Gln Tyr Phe Ser Asp Thr Phe Asp			
980	985	990	
His Leu Ile Glu Met Asp Lys Arg Glu Gly Lys Tyr Asp Met Gly Ile			
995	1000	1005	
Leu Asp Leu Ala Pro Gly Ile Glu Glu Ile Tyr Glu Glu Ser Gln Gln			
1010	1015	1020	
Val Phe Leu Ala Pro Gly His Pro Gln Asp Gly Gln Val Val Phe Tyr			
1025	1030	1035	1040
Lys Ile Ser Val Asp Arg Gly Leu Lys Trp Glu Asp Ala Phe Ala Lys			
1045	1050	1055	
Ser Leu Ala Leu Thr Gly Pro Tyr Asp Gly Phe Tyr Leu Ser Tyr Lys			
1060	1065	1070	
Val Arg Gly Asn Lys Pro Ser Cys Leu Leu Ala Glu Gln Asn Arg Gly			
1075	1080	1085	
Gln Phe Phe Thr Val Tyr Lys Pro Asn Ile Gly Arg Gln Ser Gln Leu			
1090	1095	1100	
Glu Ala Leu Asp Ser Leu Arg Arg Lys Phe His Arg Val Thr Ala Glu			
1105	1110	1115	1120
Glu Ala Lys Glu Pro Trp Glu Ser Gly Tyr Ala Leu Ser Leu Thr His			
1125	1130	1135	
Cys Ser His Ser Ala Trp Asn Arg His Cys Arg Leu Ala Gln Glu Gly			
1140	1145	1150	
Lys Asp Cys Leu Gln Gly Leu Arg Leu Arg His His Tyr Met Leu Cys			
1155	1160	1165	
Gly Ala Leu Leu Arg Val Trp Gly Arg Ile Ala Ala Val Met Ala Asp			
1170	1175	1180	
Val Ser Ser Ser Ser Tyr Leu Gln Ile Val Arg Leu Lys Thr Lys Asp			
1185	1190	1195	1200
Arg Lys Lys Gln Val Gly Ile Lys Ile Pro Glu Gly Cys Val Arg Arg			
1205	1210	1215	
Val Leu Gln Glu Leu Arg Leu Met Asp Ala Asp Val Lys Arg Arg Gln			
1220	1225	1230	
Ala Pro Ala Leu Gly Cys Pro Ala Pro Pro Ala Pro Arg Pro Leu Ala			
1235	1240	1245	
Leu Pro Cys Gly Pro Gly Glu Val Leu Asp Leu Thr Tyr Ser Pro Pro			
1250	1255	1260	
Ala Glu Ala Phe Pro Pro Pro His Phe Ser Phe Pro Ala Pro Leu			
1265	1270	1275	1280
Ser Leu Asp Ala Gly Pro Gly Val Val Pro Leu Gly Thr Pro Asp Ala			
1285	1290	1295	
Gln Ala Asp Pro Ala Ala Leu Ala His Gln Gly Cys Asp Ile Asn Phe			
1300	1305	1310	
Lys Glu Val Leu Glu Asp Met Leu Arg Ser Leu His Ala Gly Pro Pro			
1315	1320	1325	
Ser Glu Gly Ala Leu Gly Glu Gly Ala Gly Gly Ala Ala Gly			
1330	1335	1340	
Gly Gly Pro Glu Arg Gln Ser Val Ile Gln Phe Ser Pro Pro Phe Pro			
1345	1350	1355	1360
Gly Ala Gln Ala Pro Leu			
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<210> 3107

<211> 2102

<212> DNA

<213> Homo sapiens

<400> 3107

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<210> 3108
 <211> 517
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gln Glu Ala Leu Thr Phe Ala Arg Asn Trp Gly Ala Asp Tyr Ile Leu
 50 55 60
 Phe Ala Asp Thr Asp Asn Ile Leu Thr Asn Asn Gln Thr Leu Arg Leu
 65 70 75 80
 Leu Met Gly Gln Gly Leu Pro Val Val Ala Pro Met Leu Asp Ser Gln
 85 90 95
 Thr Tyr Tyr Ser Asn Phe Trp Cys Gly Ile Thr Pro Gln Gly Tyr Tyr
 100 105 110
 Arg Arg Thr Ala Glu Tyr Phe Pro Thr Lys Asn Arg Gln Arg Arg Gly
 115 120 125
 Cys Phe Arg Val Pro Met Val His Ser Thr Phe Leu Ala Ser Leu Arg
 130 135 140
 Ala Glu Gly Ala Asp Gln Leu Ala Phe Tyr Pro Pro His Pro Asn Tyr
 145 150 155 160
 Thr Trp Pro Phe Asp Asp Ile Ile Val Phe Ala Tyr Ala Cys Gln Ala
 165 170 175
 Ala Gly Val Ser Val His Val Cys Asn Glu His Arg Tyr Gly Tyr Met

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Asn Val Pro Val Lys Ser His Gln Gly Leu Glu Asp Glu Arg Val Asn		
195	200	205
Phe Ile His Leu Ile Leu Glu Ala Leu Val Asp Gly Pro Arg Met Gln		
210	215	220
Ala Ser Ala His Val Thr Arg Pro Ser Lys Arg Pro Ser Lys Ile Gly		
225	230	235
Phe Asp Glu Val Phe Val Ile Ser Leu Ala Arg Arg Pro Asp Arg Arg		
245	250	255
Glu Arg Met Leu Ala Ser Leu Trp Glu Met Glu Ile Ser Gly Arg Val		
260	265	270
Val Asp Ala Val Asp Gly Trp Met Leu Asn Ser Ser Ala Ile Arg Asn		
275	280	285
Leu Gly Val Asp Leu Leu Pro Gly Tyr Gln Asp Pro Tyr Ser Gly Arg		
290	295	300
Thr Leu Thr Lys Gly Glu Val Gly Cys Phe Leu Ser His Tyr Ser Ile		
305	310	315
Trp Glu Glu Val Val Ala Arg Gly Leu Ala Arg Val Leu Val Phe Glu		
325	330	335
Asp Asp Val Arg Phe Glu Ser Asn Phe Arg Gly Arg Leu Glu Arg Leu		
340	345	350
Met Glu Asp Val Glu Ala Glu Lys Leu Ser Trp Asp Leu Ile Tyr Leu		
355	360	365
Gly Arg Lys Gln Val Asn Pro Glu Lys Glu Thr Ala Val Glu Gly Leu		
370	375	380
Pro Gly Leu Val Val Ala Gly Tyr Ser Tyr Trp Thr Leu Ala Tyr Ala		
385	390	395
Leu Arg Leu Ala Gly Ala Arg Lys Leu Leu Ala Ser Gln Pro Leu Arg		
405	410	415
Arg Met Leu Pro Val Asp Glu Phe Leu Pro Ile Met Phe Asp Gln His		
420	425	430
Pro Asn Glu Gln Tyr Lys Ala His Phe Trp Pro Arg Asp Leu Val Ala		
435	440	445
Phe Ser Ala Gln Pro Leu Leu Ala Ala Pro Thr His Tyr Ala Gly Asp		
450	455	460
Ala Glu Trp Leu Ser Asp Thr Glu Thr Ser Ser Pro Trp Asp Asp Asp		
465	470	475
Ser Gly Arg Leu Ile Ser Trp Ser Gly Ser Gln Lys Thr Leu Arg Ser		
485	490	495
Pro Arg Leu Asp Leu Thr Gly Ser Ser Gly His Ser Leu Gln Pro Gln		
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Pro Arg Asp Glu Leu		
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<210> 3109

<211> 959

<212> DNA

<213> Homo sapiens

<400> 3109

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120

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 780
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<210> 3110
<211> 207
<212> PRT
<213> Homo sapiens

<400> 3110
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 Trp His Cys Lys Ile Asp Glu Gly Ser Ala Gly Leu Val Ala Ser Cys
 20 25 30
 Trp Ser Pro Asp Gly Arg His Ile Leu Asn Thr Thr Glu Phe His Leu
 35 40 45
 Arg Ile Thr Val Trp Ser Leu Cys Thr Lys Ser Val Ser Tyr Ile Lys
 50 55 60
 Tyr Pro Lys Ala Cys Leu Gln Gly Ile Thr Phe Thr Arg Asp Gly Arg
 65 70 75 80
 Tyr Met Ala Leu Ala Glu Arg Arg Asp Cys Lys Asp Tyr Val Ser Ile
 85 90 95
 Phe Val Cys Ser Asp Trp Gln Leu Leu Arg His Phe Asp Thr Asp Thr
 100 105 110
 Gln Asp Leu Thr Gly Ile Glu Trp Ala Pro Asn Gly Cys Val Leu Ala
 115 120 125
 Val Trp Asp Thr Cys Leu Glu Tyr Lys Ile Leu Leu Tyr Ser Leu Asp
 130 135 140
 Gly Arg Leu Leu Ser Thr Tyr Ser Ala Xaa Arg Val Val Xaa Leu Gly

145 150 155 160
Ile Lys Ser Val Ala Trp Ser Pro Ser Ser Gln Phe Leu Ala Val Gly
165 170 175
Ser Tyr Asp Gly Lys Val Arg Ile Leu Asn His Val Thr Trp Lys Met
180 185 190
Ile Thr Glu Phe Gly His Pro Cys Ser Pro Ile Asn Asp Ser Gln
195 200 205

<210> 3111
<211> 1269
<212> DNA
<213> Homo sapiens

<400> 3111
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180
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240
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300
tccatccaga gactgaaacc gtttctatcc ggtcagtggc AAAACTGTG AAAGGGCAAT
360
agttGAAGCT gttgggtttt atatAGTGTG aactctgata aatattccta ccaggactaa
420
aacacAGCAC gcttgcccc catggctgac tcacAAAGGT tgtaacAAAC aagaactact
480
cttcactcga caccatggct cagaggcac cGAGAACGAC gagtgactga cagtcctct
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1269

<210> 3112
<211> 151
<212> PRT
<213> *Homo sapiens*

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      20          25          30
Glu Gly Arg Arg Gly Ala Arg Thr Ala Gly Leu Arg Gly Arg Pro Trp
      35          40          45
Arg Asp Trp Glu Glu Arg Arg Gly Val Thr Thr Val Gln His Pro Glu
      50          55          60
Lys Ser Asp Trp Gln Thr Arg Thr Gly Gln Pro Cys Ser Cys Met Ile
      65          70          75          80
Gln Glu Leu Ala Ser Glu Arg Glu Ser Val Ala Glu Ala Gly Gly Ser
      85          90          95
Ala Arg Gln Lys Val Arg Gly Leu Val Leu Arg Arg Gly Lys Arg Gln
      100         105         110
Ser Glu Ser Leu His Ala Pro Gly Leu His Gly Arg Ala Arg Ala Ser
      115         120         125
Gln Lys Arg Val Asn Asp Pro Glu Cys Asp Trp Glu Gly Glu Leu Ile
      130         135         140
Pro Tyr Gln Glu Thr Gly Ser
      145         150

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<210> 3113  
<211> 631  
<212> DNA  
<213> Homo sapiens
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<400> 3113
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420
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480

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<210> 3114
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 3114
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 35 40 45
 Leu Leu Glu Arg Asn Ile Thr Val Thr Met Tyr Ile Thr Ile Gly Thr
 50 55 60
 Arg Asn Leu Gln Lys Tyr Val Ser Arg Thr Ser Val Val Phe Val Ser
 65 70 75 80
 Ile Ser Phe Ile Val Leu Met Ile Ile Ser Leu Ala Trp Leu Val Phe
 85 90 95
 Tyr Tyr Ile Gln Arg Phe Arg Tyr Ala Asn Ala Arg Asp Arg Asn Gln
 100 105 110
 Arg Arg Leu Gly Asp Ala Ala Lys Lys Ala Ile Ser Lys Leu Gln Ile
 115 120 125
 Arg Thr Ile Lys Lys Gly Asp Lys Glu Thr Glu Ser Asp Phe Asp Asn
 130 135 140
 Cys Ala Val Cys Ile Glu Gly Tyr Lys Pro Asn Asp Val Val Arg Ile
 145 150 155 160
 Leu Pro Cys Arg His Leu Phe His Lys Ser Cys Val Asp Pro Trp Leu
 165 170 175
 Leu Asp His Arg Thr Cys Pro Met Cys Lys Met Asn Ile Leu Lys Ala
 180 185 190
 Leu Gly Ile Pro Pro Asn Ala Asp Cys Met Asp Asp Phe Ala Thr Asp
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 Phe Glu
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<210> 3115
 <211> 1366
 <212> DNA
 <213> Homo sapiens

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 180

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 360
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 420
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 1366

<210> 3116
 <211> 191
 <212> PRT
 <213> Homo sapiens

<400> 3116
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 20 25 30
 Leu Leu Tyr Ser Ser Gly Leu Val Glu Cys Glu Asp Gln Asp Pro Leu
 35 40 45
 Asn Pro Asp Arg Ser Phe Asp Val Glu Ser Val Lys Lys Glu Ile Gln

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Lys	Leu	Lys
Cys	Lys	Phe
Cys	Asn	Cys
His	Tyr	Arg
Lys	Asn	Gly
Ala	Thr	
65	70	75
Val	Gly	Cys
Cys	Asp	Leu
Asp	Lys	Lys
Asn	Cys	Asn
Lys	Tyr	His
Asn	Phe	Phe
	Cys	
85	90	95
Ala	Lys	Asp
Lys	Asp	Ala
Asp	Ala	Val
Ala	Val	Pro
Pro	Gln	Ser
Ser	Asp	Gly
Gly	Val	Arg
Arg	Gly	Ile
100	105	110
Tyr	Lys	Leu
Leu	Cys	Gln
Gln	His	Ala
His	Gln	Phe
Phe	Pro	Ile
Ile	Ile	Ala
Ala	Gln	
115	120	125
Ser	Gly	Lys
Lys	Phe	Ser
Ser	Gly	Val
Val	Lys	Arg
Arg	Gly	Arg
130	135	140
Leu	Ser	Gly
Gly	Asn	His
Asn	His	Val
His	Gln	Gln
Gln	Pro	Pro
Pro	Glu	Thr
Glu	Met	Lys
Met	Lys	Cys
Cys	Asn	Thr
145	150	155
Phe	Ile	Arg
Ile	Arg	Gln
Gln	Val	Lys
Lys	Glu	Glu
Glu	His	Gly
His	Gly	Arg
Gly	Arg	His
Arg	His	Thr
165	170	175
Val	Lys	Val
Val	Pro	Phe
Phe	Leu	Lys
Lys	Cys	Lys
Cys	Xaa	Ser
Xaa	Ser	Arg
Arg	Thr	Thr
Thr	Ser	
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<210> 3117

<211> 1373

<212> DNA

<213> Homo sapiens

<400> 3117

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<210> 3118
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 3118
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 35 40 45
 Pro Ala Asn Leu Leu Gln Gly Ala Ser Lys Leu Gln Glu Leu His Leu
 50 55 60
 Ser Ser Asn Gly Leu Glu Ser Leu Ser Pro Glu Phe Leu Arg Pro Val
 65 70 75 80
 Pro Gln Leu Arg Val Leu Asp Leu Thr Arg Asn Ala Leu Thr Gly Leu
 85 90 95
 Pro Pro Gly Leu Phe Gln Ala Ser Ala Thr Leu Asp Thr Leu Val Leu
 100 105 110
 Lys Glu Asn Gln Leu Glu Val Leu Glu Val Ser Trp Leu His Gly Leu
 115 120 125
 Lys Ala Leu Gly His Leu Asp Leu Ser Gly Asn Arg Leu Arg Lys Leu
 130 135 140
 Pro Pro Gly Leu Leu Ala Asn Phe Thr Leu Leu Arg Thr Leu Asp Leu
 145 150 155 160
 Gly Glu Asn Gln Leu Glu Thr Leu Pro Pro Asp Leu Leu Arg Gly Pro
 165 170 175
 Leu Gln Leu Glu Arg Leu His Leu Glu Gly Asn Lys Leu Gln Val Leu
 180 185 190
 Gly Lys Asp Leu Leu Leu Pro Gln Pro Asp Leu Arg Tyr Leu Phe Leu
 195 200 205
 Ser Gly Asn Lys Leu Ala Arg Val Ala Ala Gly Ala Phe Gln Gly Leu
 210 215 220
 Arg Gln Leu Asp Met Leu Asp Leu Ser Asn Asn Ser Leu Ala Ser Val
 225 230 235 240
 Pro Glu Gly Leu Trp Ala Ser Leu Gly Gln Pro Asn Trp Asp Met Arg

	245	250	255												
Asp	Gly	Phe	Asp	Ile	Ser	Gly	Asn	Pro	Trp	Ile	Cys	Asp	Gln	Asn	Leu
		260				265							270		
Ser	Asp	Leu	Tyr	Arg	Trp	Leu	Gln	Ala	Gln	Lys	Asp	Lys	Met	Phe	Ser
		275				280							285		
Gln	Asn	Asp	Thr	Arg	Cys	Ala	Gly	Pro	Glu	Ala	Val	Lys	Gly	Gln	Thr
		290				295						300			
Leu	Leu	Ala	Val	Ala	Lys	Ser	Gln								
		305				310									

<210> 3119
<211> 427
<212> DNA
<213> Homo sapiens

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120
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180
ttggggccgca gtggcatgtc ccctccaccc tgcaagctgc cctgcctctc accacacctacc
240
tacaccaccc tccaagccac cccaaacgctc attcccacgg agacggcagc tctataccccc
300
tcttcagcac tgctcccagc tgccagggtg cctgctgccc ccacccctgt tgccctactat
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420
aacgcgt
427

<210> 3120
<211> 142
<212> PRT
<213> Homo sapiens

<400> 3120
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Ile Gln Met Thr Ser Ala Glu Arg Ala Leu Ala Ala Gln Arg Cys
20 25 30
His Lys Lys Val Met Lys Glu Arg Tyr Val Glu Val Val Pro Cys Ser
35 40 45
Thr Glu Glu Met Ser Arg Val Leu Met Gly Gly Thr Leu Gly Arg Ser
50 55 60
Gly Met Ser Pro Pro Cys Lys Leu Pro Cys Leu Ser Pro Pro Thr
65 70 75 80
Tyr Thr Thr Phe Gln Ala Thr Pro Thr Leu Ile Pro Thr Glu Thr Ala
85 90 95
Ala Leu Tyr Pro Ser Ser Ala Leu Leu Pro Ala Ala Arg Val Pro Ala
100 105 110
Ala Pro Thr Pro Val Ala Tyr Tyr Pro Gly Pro Ala Thr Gln Leu Tyr

115	120	125
Leu Asn Tyr Thr Ala Tyr Tyr Pro Ser Pro Glu Asp Asn Ala		
130	135	140

<210> 3121

<211> 284

<212> DNA

<213> Homo sapiens

<400> 3121

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120
taagaggaac atgaacctgg acggggcagc ttccattgtc ccttcctgc tcctgctaatt
180
gaacaaggcc tccccagagt atgaagagaa catgcacaga taccagaagg cagccaagct
240
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284

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<210> 3122

<211> 91

<212> PRT

<213> Homo sapiens

<400> 3122

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20 25 30
Ser His Val Arg Arg Asn Lys Arg Asn Met Asn Leu Asp Gly Ala Ala
35 40 45
Ser Ile Val Pro Leu Leu Leu Leu Met Asn Lys Ala Ser Pro Glu
50 55 60
Tyr Glu Glu Asn Met His Arg Tyr Gln Lys Ala Ala Lys Leu Phe Arg
65 70 75 80
Gly Arg Phe Ser Leu Phe Trp Trp Thr Val Val
85 90

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<210> 3123

<211> 344

<212> DNA

<213> Homo sapiens

<400> 3123

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120
gcagcccagg tgaccttcag aaagacattg gagaaggaag caaagggaga ggagccccgac
180
atcgcagtcc ccaagttcaa acagaggaag ggggagtcgg acggggccta tatccaccgc
240

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atgcagcaag aggcccagca tgtgctgttc ctcagcaaga accaggccat ccggcagcca
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344

<210> 3124
<211> 92
<212> PRT
<213> Homo sapiens

<400> 3124
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Lys Lys Ala Ala Gln Val Thr Phe Arg Lys Thr Leu Glu Lys Glu Ala
20 25 30
Lys Gly Glu Glu Pro Asp Ile Ala Val Pro Lys Phe Lys Gln Arg Lys
35 40 45
Gly Glu Ser Asp Gly Ala Tyr Ile His Arg Met Gln Gln Glu Ala Gln
50 55 60
His Val Leu Phe Leu Ser Lys Asn Gln Ala Ile Arg Gln Pro Glu Val
65 70 75 80
Gln Ala Ala Pro Lys Glu Lys Ser Glu Gln Lys Lys
85 90

<210> 3125
<211> 647
<212> DNA
<213> Homo sapiens

<400> 3125
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120
ggtcagcagg cagtttagtt gtgggagttt ttccaatttg catgaatgaa acatggacaa
180
ataagataag gctggctcca gggaaagtaat tccccagtt cccctgagcc ttggatctgg
240
aaaactgcag cccatcctgg aattaggaa catcacaaaa cgtactgggg agaactcccc
300
atgtggcctc ggcccacgcc agaagccggg caaggtccc agtggccgct cgcccacaag
360
ctatggctaa gacagaaaaaa caaaggaaaa aaagtccctcc ccaaacacac acataagcaa
420
aacccatctt cctgtgttct ctgccaagag agctggagca aaagagatga gtttgagact
480
ctgattcattc catcaagaca aataaactca gtctatggag gtttagcaggg caatttgta
540
agcaaacaaa agttgagttt tggaaagggg ctctgaagaa aatgaagatg acataccagg
600
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647

<210> 3126

<211> 116
<212> PRT
<213> Homo sapiens

<400> 3126
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Phe Gln Asn Ser Thr Phe Val Cys Phe Thr Asn Cys Pro Ala Asn Leu
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His Arg Leu Ser Leu Phe Val Leu Met Asp Glu Ser Glu Ser Gln Thr
35 40 45
His Leu Phe Cys Ser Ser Ser Leu Gly Arg Glu His Arg Lys Met Gly
50 55 60
Phe Ala Tyr Val Cys Val Trp Gly Gly Leu Phe Phe Leu Cys Phe Ser
65 70 75 80
Val Leu Ala Ile Ala Cys Gly Arg Ala Gly Thr Trp Asp Leu Ala Arg
85 90 95
Leu Leu Ala Trp Ala Glu Ala Thr Trp Gly Val Leu Pro Ser Thr Phe
100 105 110
Cys Asp Val Pro
115

<210> 3127
<211> 2218
<212> DNA
<213> Homo sapiens

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120
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240
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480
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720
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780

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1980
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2218

<210> 3128
<211> 565
<212> PRT
<213> Homo sapiens

<400> 3128

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 Gln Glu Gly Lys Ile Pro Asp Glu Thr Leu Glu Lys Leu Lys Ser Leu
 35 40 45
 Gly Leu Phe Gly Leu Gln Val Pro Glu Glu Tyr Gly Leu Gly Phe
 50 55 60
 Ser Asn Thr Met Tyr Ser Arg Leu Gly Glu Ile Ile Ser Met Asp Gly
 65 70 75 80
 Ser Ile Thr Val Thr Leu Ala Ala His Gln Ala Ile Gly Leu Lys Gly
 85 90 95
 Ile Ile Leu Ala Gly Thr Glu Glu Gln Lys Ala Lys Tyr Leu Pro Lys
 100 105 110
 Leu Ala Ser Gly Glu His Ile Ala Ala Phe Cys Leu Thr Glu Pro Ala
 115 120 125
 Ser Gly Ser Asp Ala Ala Ser Ile Arg Ser Arg Ala Thr Leu Ser Glu
 130 135 140
 Asp Lys Lys His Tyr Ile Leu Asn Gly Ser Lys Val Trp Ile Thr Asn
 145 150 155 160
 Gly Gly Leu Ala Asn Ile Phe Thr Val Phe Ala Lys Thr Glu Val Val
 165 170 175
 Asp Ser Asp Gly Ser Val Lys Asp Lys Ile Thr Ala Phe Ile Val Glu
 180 185 190
 Arg Asp Phe Gly Gly Val Thr Asn Gly Lys Pro Glu Asp Lys Leu Gly
 195 200 205
 Ile Arg Gly Ser Asn Thr Cys Glu Val His Phe Glu Asn Thr Lys Ile
 210 215 220
 Pro Val Glu Asn Ile Leu Gly Glu Val Gly Asp Gly Phe Lys Val Ala
 225 230 235 240
 Met Asn Ile Leu Asn Ser Gly Arg Phe Ser Met Gly Ser Val Val Ala
 245 250 255
 Gly Leu Leu Lys Arg Leu Ile Glu Met Thr Ala Glu Tyr Ala Cys Thr
 260 265 270
 Arg Lys Gln Phe Asn Lys Arg Leu Ser Glu Phe Gly Leu Ile Gln Glu
 275 280 285
 Lys Phe Ala Leu Met Ala Gln Lys Ala Tyr Val Met Glu Ser Met Thr
 290 295 300
 Tyr Leu Thr Ala Gly Met Leu Asp Gln Pro Gly Phe Pro Asp Cys Ser
 305 310 315 320
 Ile Glu Ala Ala Met Val Lys Val Phe Ser Ser Glu Ala Ala Trp Gln
 325 330 335
 Cys Val Ser Glu Ala Leu Gln Ile Leu Gly Gly Leu Gly Tyr Thr Arg
 340 345 350
 Asp Tyr Pro Tyr Glu Arg Ile Leu Arg Asp Thr Arg Ile Leu Leu Ile
 355 360 365
 Phe Glu Gly Thr Asn Glu Ile Leu Arg Met Tyr Ile Ala Leu Thr Gly
 370 375 380
 Leu Gln His Ala Gly Arg Ile Leu Thr Thr Arg Ile His Glu Leu Lys
 385 390 395 400
 Gln Ala Lys Val Ser Thr Val Met Asp Thr Val Gly Arg Arg Leu Arg
 405 410 415
 Asp Ser Leu Gly Arg Thr Val Asp Leu Gly Leu Thr Gly Asn His Gly

	420	425	430
Val Val His Pro Ser Leu Ala Asp Ser Ala Asn Lys Phe Glu Glu Asn			
	435	440	445
Thr Tyr Cys Phe Gly Arg Thr Val Glu Thr Leu Leu Leu Arg Phe Gly			
	450	455	460
Lys Thr Ile Met Glu Glu Gln Leu Val Leu Lys Arg Val Ala Asn Ile			
	465	470	475
Leu Ile Asn Leu Tyr Gly Met Thr Ala Val Leu Ser Arg Ala Ser Arg			
	485	490	495
Ser Ile Arg Ile Gly Leu Arg Asn His Asp His Glu Val Leu Leu Ala			
	500	505	510
Asn Thr Phe Cys Val Glu Ala Tyr Leu Gln Asn Leu Phe Ser Leu Ser			
	515	520	525
Gln Leu Asp Lys Tyr Ala Pro Glu Asn Leu Asp Glu Gln Ile Lys Lys			
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<210> 3129

<211> 1964

<212> DNA

<213> Homo sapiens

<400> 3129

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<210> 3130

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3130

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								20		25			30		
Gly	Pro	Gly	Ala	Ala	Gln	Glu	Pro	Thr	Trp	Leu	Thr	Asp	Val	Pro	Ala
								35		40			45		
Ala	Met	Glu	Phe	Ile	Ala	Ala	Thr	Glu	Val	Ala	Val	Ile	Gly	Phe	Phe
								50		55			60		
Gln	Asp	Leu	Glu	Ile	Pro	Ala	Val	Pro	Ile	Leu	His	Ser	Met	Val	Gln

65	70	75	80												
Lys	Phe	Pro	Gly	Val	Ser	Phe	Gly	Ile	Ser	Thr	Asp	Ser	Glu	Val	Leu
			85				90							95	
Thr	His	Tyr	Asn	Ile	Thr	Gly	Asn	Thr	Ile	Cys	Leu	Phe	Arg	Leu	Val
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Asp	Asn	Glu	Gln	Leu	Asn	Leu	Glu	Asp	Glu	Asp	Ile	Glu	Ser	Ile	Asp
				115			120							125	
Ala	Thr	Lys	Leu	Ser	Arg	Phe	Ile	Glu	Ile	Asn	Ser	Leu	His	Met	Val
				130			135							140	
Thr	Glu	Tyr	Asn	Pro	Val	Thr	Val	Ile	Gly	Leu	Phe	Asn	Ser	Val	Ile
				145			150			155				160	
Gln	Ile	His	Leu	Leu	Leu	Ile	Met	Asn	Lys	Ala	Ser	Pro	Glu	Tyr	Glu
				165			170							175	
Glu	Asn	Met	His	Arg	Tyr	Gln	Lys	Ala	Ala	Lys	Leu	Phe	Gln	Gly	Lys
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Ile	Leu	Phe	Ile	Leu	Val	Asp	Ser	Gly	Met	Lys	Glu	Asn	Gly	Lys	Val
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Ile	Ser	Phe	Phe	Lys	Leu	Lys	Glu	Ser	Gln	Leu	Pro	Ala	Leu	Ala	Ile
				210			215							220	
Tyr	Gln	Thr	Leu	Asp	Asp	Glu	Trp	Asp	Thr	Leu	Pro	Thr	Ala	Glu	Val
				225			230			235				240	
Ser	Val	Glu	His	Val	Gln	Asn	Phe	Cys	Asp	Gly	Phe	Leu	Ser	Gly	Lys
				245			250							255	
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Leu															

<210> 3131

<211> 1544

<212> DNA

<213> Homo sapiens

<400> 3131

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<210> 3132
 <211> 283
 <212> PRT
 <213> Homo sapiens

<400> 3132
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 Thr Arg Ser Pro Val Ser Pro Leu Ala Ala Gln Gly Ile Pro Leu Pro
 35 40 45
 Ala Gln Leu Thr Lys Ser Asn Ala Pro Val His Ile Asp Val Gly Gly
 50 55 60
 His Met Tyr Thr Ser Ser Leu Ala Thr Leu Thr Lys Tyr Pro Glu Ser
 65 70 75 80
 Arg Ile Gly Arg Leu Phe Asp Gly Thr Glu Pro Ile Val Leu Asp Ser
 85 90 95
 Leu Lys Gln His Tyr Phe Ile Asp Arg Asp Gly Gln Met Phe Arg Tyr
 100 105 110
 Ile Leu Asn Phe Leu Arg Thr Ser Lys Leu Leu Ile Pro Asp Asp Phe

115	120	125
Lys Asp Tyr Thr Leu Leu Tyr Glu Glu Ala Lys	Tyr Phe Gln Leu Gln	
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Val Ala Val Ala Thr Ile Leu Glu Lys Thr Leu Asp Ser Ala Leu Phe		
595	600	605
Tyr Gln Asp Lys Leu Lys Ser Leu His Gln Leu Leu Glu Val Leu Leu		
610	615	620
Ala Leu Leu Asp Lys Asp Val Pro Glu Asn Cys Lys Asn Cys Ala Gln		
625	630	635
Tyr Phe Phe Leu Phe Asn Thr Phe Val Gln Lys Gln Gly Ile Arg Ala		
645	650	655
Gly Asp Leu Leu Arg His Ser Ala Leu Arg His Met Ile Ser Phe		
660	665	670
Leu Leu Gly Ala Ser Arg Gln Asn Asn Gln Ile Arg Arg Trp Ser Ser		
675	680	685
Ala Gln Ala Arg Glu Phe Gly Asn Leu His Asn Thr Val Ala Leu Leu		
690	695	700
Val Leu His Ser Asp Val Ser Ser Gln Arg Asn Val Ala Pro Gly Ile		
705	710	715
Phe Lys Gln Arg Pro Pro Ile Ser Ile Ala Pro Ser Ser Pro Leu Leu		
725	730	735
Pro Leu His Glu Glu Val Glu Ala Leu Leu Phe Met Ser Glu Gly Lys		
740	745	750
Pro Tyr Leu Leu Glu Val Met Phe Ala Leu Arg Glu Leu Thr Gly Ser		
755	760	765
Leu Leu Ala Leu Ile Glu Met Val Val Tyr Cys Cys Phe Cys Asn Glu		
770	775	780
His Phe Ser Phe Thr Met Leu His Phe Ile Lys Asn Gln Leu Glu Thr		
785	790	795
800		
Ala Pro Pro His Glu Leu Lys Asn Thr Phe Gln Leu Leu His Glu Ile		
805	810	815
Leu Val Ile Glu Asp Pro Ile Gln Ala Glu Arg Val Lys Phe Val Phe		
820	825	830
Glu Thr Glu Asn Gly Leu Leu Ala Leu Met His His Ser Asn His Val		
835	840	845
Asp Ser Ser Arg Cys Tyr Gln Cys Val Lys Phe Leu Val Thr Leu Ala		
850	855	860
Gln Lys Cys Pro Ala Ala Lys Glu Tyr Phe Lys Glu Asn Ser His His		
865	870	875
Trp Ser Trp Ala Val Gln Trp Leu Gln Lys Lys Met Ser Glu His Tyr		

885	890	895
Trp Thr Pro Gln Ser Asn Val Ser Asn Glu Thr Ser Thr Gly Lys Thr		
900	905	910
Phe Gln Arg Thr Ile Ser Ala Gln Asp Ala Leu Ala Tyr Ala Thr Ala		
915	920	925
Leu Leu Asn Glu Lys Glu Gln Ser Gly Ser Ser Asn Gly Ser Glu Ser		
930	935	940
Ser Pro Ala Asn Glu Asn Gly Asp Arg His Leu Gln Gln Gly Ser Glu		
945	950	955
Ser Pro Met Met Ile Gly Glu Leu Arg Ser Asp Leu Asp Asp Val Asp		
965	970	975

Pro

<210> 3139
<211> 503
<212> DNA
<213> Homo sapiens

<400> 3139
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120
acctccccgc tgctatggta cttctactca gccctgcccc gcggcctggg ctgcagcctg
180
ctcttcatcc ctttgggctt ggttagacaga aggacgcacg cgccgacggt gctggcactg
240
ggcttcatgg cactctactc cttcctgcca cacaaggagc tacgcttcat catctatgcc
300
ttccccatgc tcaacatcac ggctgcccaga ggctgctcct acctgtgagt gctcttttg
360
tgacatgcat ttttatagtt tcattggaaa caggttcaact gatttactgt tggggggatg
420
tatgtgtgtg tttatattttt gaaacaggggt cttgctctgt cgcccagctg gagtggggct
480
tactgcaccc ctcaactcct agg
503

<210> 3140
<211> 115
<212> PRT
<213> Homo sapiens

<400> 3140
Xaa Ile Leu Cys Leu Gly Leu Thr Val Ala Val Asp Ser Tyr Phe Trp
1 5 10 15
Arg Gln Leu Thr Trp Pro Glu Gly Lys Val Leu Trp Tyr Asn Thr Val
20 25 30
Leu Asn Lys Ser Ser Asn Trp Gly Thr Ser Pro Leu Leu Trp Tyr Phe
35 40 45
Tyr Ser Ala Leu Pro Arg Gly Leu Gly Cys Ser Leu Leu Phe Ile Pro
50 55 60
Leu Gly Leu Val Asp Arg Arg Thr His Ala Pro Thr Val Leu Ala Leu

65	70	75	80
Gly Phe Met Ala Leu Tyr Ser Leu Leu Pro His Lys Glu Leu Arg Phe			
85	90	95	
Ile Ile Tyr Ala Phe Pro Met Leu Asn Ile Thr Ala Ala Arg Gly Cys			
100	105	110	
Ser Tyr Leu			
115			

<210> 3141

<211> 1815

<212> DNA

<213> Homo sapiens

<400> 3141

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 cagggtggcg tccccggccc accggccagg agaggcctgc gctgcacacg cgccagaccga
 120
 gcatccgcgt caagaggcga agagagcgcg cgctccccac gtcttgcgtc cctggctgcc
 180
 gggcatcgt ctcaagccgtg actctcgcca ggccggggct ggccgcgccca cgtctgaaga
 240
 gcgatgcccc gggagatcat caccctgcag ctggggcagt gcggcaacca gattgggttc
 300
 gagttctgga aacagctgtg cgccgagcat ggtatcagcc ccgagggcat cgtggaggag
 360
 ttccgccaccg agggcactga ccgcaaggac gtcttttctt accaggcaga cgatgagcac
 420
 tacatcccccc gggccgtgct gctggacttg gaaccccggt tgatccactc catcctcaac
 480
 tccccctatg ccaagctcta caacccagag aacatctacc tgtcgaaaca tggaggagga
 540
 gctggcaaca actggggccag cgattctcc cagggtgaga aaattcatga ggacatttt
 600
 gacatcatag accggggaggc agatggtagt gacagtctag agggctttgt gctgtgtcac
 660
 tccattgctg gggggacagg ctctggactg ggttccctacc tcttagaaacg gctgaatgac
 720
 aggtatccta agaagctggt gcagacatac tcagtgtttc ccaaccagga cgagatgagc
 780
 gatgtggtgg tccagcctta caattcactc ctcacactca agaggctgac gcagaatgca
 840
 gactgtgtgg tggtgctgga caacacagcc ctgaaccgga ttgccacaga ccgcctgcac
 900
 atccagaacc catccttctc ccagatcaac cagctggtgt ctaccatcat gtcagccagc
 960
 accaccaccc tgcgttaccc tggctacatg aacaatgacc tcattggctt catcgccctcg
 1020
 ctcattccca cccacggct ccacttcctc atgaccggct acaccccgct cactacagac
 1080
 cagtcagtgg ccagcgtgag gaagaccacg gtcctggatg tcattggcg gctgtgtcag
 1140
 cccaagaacg tcatggtgac cacaggccga gaccggcaga ccaaccactg ctacatcgcc
 1200

atcctcaaca tcatccaggg agaggtggac cccacccagg tccacaagag cttgcagagg
 1260
 atccgggaac gcaagttggc caacttcattc ccgtggggcc ccgcccagcat ccaggtggcc
 1320
 ctgtcgagga agtctcccta cctgcctcg gcccacccggg tcagcgggct catgatggcc
 1380
 aaccacacca gcacatcttc gctttcgag agaacctgtc gccagtatga caagctgcgt
 1440
 aagccccagg cttcctgga gcagttccgc aaggaggaca tttcaagga caactttgat
 1500
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 1560
 cggccagact acatctctg gggcacccag gagcagttag tcccccaagga cagggaccct
 1620
 catctgcctt actgggtggc ccaagccctg cctgactgac cacccctca gagcacagat
 1680
 cagggacact acgcatctt ttctcatata catggactt ctgttggct gcaaacacat
 1740
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 1800
 aaaaaaaaaa aaaaa
 1815

<210> 3142
 <211> 451
 <212> PRT
 <213> Homo sapiens

<400> 3142
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 Ile Gly Phe Glu Phe Trp Lys Gln Leu Cys Ala Glu His Gly Ile Ser
 20 25 30
 Pro Glu Gly Ile Val Glu Glu Phe Ala Thr Glu Gly Thr Asp Arg Lys
 35 40 45
 Asp Val Phe Phe Tyr Gln Ala Asp Asp Glu His Tyr Ile Pro Arg Ala
 50 55 60
 Val Leu Leu Asp Leu Glu Pro Arg Val Ile His Ser Ile Leu Asn Ser
 65 70 75 80
 Pro Tyr Ala Lys Leu Tyr Asn Pro Glu Asn Ile Tyr Leu Ser Glu His
 85 90 95
 Gly Gly Gly Ala Gly Asn Asn Trp Ala Ser Gly Phe Ser Gln Gly Glu
 100 105 110
 Lys Ile His Glu Asp Ile Phe Asp Ile Ile Asp Arg Glu Ala Asp Gly
 115 120 125
 Ser Asp Ser Leu Glu Gly Phe Val Leu Cys His Ser Ile Ala Gly Gly
 130 135 140
 Thr Gly Ser Gly Leu Gly Ser Tyr Leu Leu Glu Arg Leu Asn Asp Arg
 145 150 155 160
 Tyr Pro Lys Lys Leu Val Gln Thr Tyr Ser Val Phe Pro Asn Gln Asp
 165 170 175
 Glu Met Ser Asp Val Val Val Gln Pro Tyr Asn Ser Leu Leu Thr Leu
 180 185 190
 Lys Arg Leu Thr Gln Asn Ala Asp Cys Val Val Val Leu Asp Asn Thr

195	200	205
Ala	Leu	Asn
Arg	Ile	Ala
Ile	Asn	Arg
Thr	Asp	Arg
Leu	His	Ile
His	Gln	Asn
Pro	Pro	Ser
210	215	220
Phe	Ser	Gln
Ile	Asn	Gln
Leu	Val	Ser
Thr	Ile	Met
225	230	235
Met	Ser	Ala
Ser	Thr	Thr
Thr	Leu	Arg
Tyr	Pro	Gly
Tyr	Met	Asn
Asn	Asn	Asp
Leu	Ile	Gly
245	250	255
Gly	Leu	
Ile	Ala	Ser
Leu	Ile	Pro
Pro	Thr	Arg
Leu	His	Phe
Phe	Leu	Met
Met	Thr	Gly
260	265	270
Tyr	Thr	Pro
Leu	Thr	Thr
Thr	Asp	Gln
Gln	Ser	Val
Ala	Ser	Val
Arg	Val	Arg
275	280	285
Lys	Thr	
Thr	Val	Asp
Val	Met	Arg
Arg	Leu	Leu
Leu	Gln	Pro
Gln	Pro	Lys
Asn	Asn	Asn
Val	Val	Val
290	295	300
Gly	Gly	
Arg	Arg	
Asp	Arg	
Gln	Gln	
Thr	Asn	
Asn	His	
Cys	Tyr	
Ile	Ala	
305	310	315
Ile		
Leu	Asn	
Ile	Ile	
Gln	Gly	
Glu	Val	
Val	Asp	
Asp	Pro	
Thr	Gln	
Gln	Val	
Val	His	
Lys	Lys	
Ser	Ser	
325	330	335
Leu	Gln	
Gln	Arg	
Arg	Ile	
Glu	Arg	
Lys	Leu	
Leu	Ala	
Asn	Asn	
Phe	Phe	
Ile	Pro	
340	345	350
Gly	Trp	
Pro	Ala	
Ala	Ser	
Ile	Gln	
Gln	Val	
Val	Ala	
Ala	Ser	
Arg	Arg	
Lys	Ser	
Ser	Pro	
Tyr	Tyr	
Leu	Leu	
355	360	365
Asp	Pro	
Asp	Tyr	
Tyr	Ile	
Ile	Ser	
Asp	Trp	
Glu	Gly	
Thr	Thr	
405	410	415
Asn	Phe	
Phe	Asp	
Asp	Glu	
Glu	Met	
Met	Asp	
Asp	Thr	
Thr	Ser	
Ser	Arg	
Arg	Glu	
Glu	Ile	
Ile	Val	
Val	Gln	
Gln	Gln	
420	425	430
Asp	Glu	
Glu	Tyr	
Tyr	His	
His	Ala	
Ala	Thr	
Thr	Arg	
Arg	Pro	
Pro	Asp	
Asp	Tyr	
Tyr	Ile	
Ile	Ser	
Ser	Trp	
Trp	Gly	
Gly	Thr	
435	440	445
Gln	Glu	
Gln		
450		

<210> 3143

<211> 356

<212> DNA

<213> Homo sapiens

<400> 3143

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120
caggccctgag ctccctggctg gtgggaaggg gaggctgctg gtccacagtg tgggggtgct
180
tcaccggttaa ccaagccatc ccccatgctg ggctgtggc actagcggaa ttgagagcct
240
cagaaaccca ggtgctgctg tgtgaggctg tcgcagccac gaagatgacc atgactgcaa
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356

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<210> 3144

<211> 81
<212> PRT
<213> Homo sapiens

<400> 3144
Met Val Ile Phe Val Ala Ala Thr Ala Ser His Ser Ser Thr Trp Val
1 5 10 15
Ser Glu Ala Leu Asn Ser Ala Ser Ala Ser Arg Pro Ala Trp Gly Met
20 25 30
Ala Trp Leu Thr Val Lys His Pro His Thr Val Asp Gln Gln Pro Pro
35 40 45
Leu Pro Thr Ser Gln Glu Leu Arg Pro Ala Ala Gln Pro Lys Gln Gln
50 55 60
Pro His His Ser Gln Thr Pro Pro Gln Arg Val Cys Leu Arg Ala Pro
65 70 75 80
Ser

<210> 3145
<211> 436
<212> DNA
<213> Homo sapiens

<400> 3145
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atccgaagag cccgattacc agctgctcgg gagggccaag caggaccggg ggaggccaaa
120
ctccgaggag cccgctccac ctgccctcag gagggtgttt aaaacggagg ttgccaccgt
180
ttacgcacct gccctcagtgc ccagggcccc cgagcctggt ttgtcagact ctgcagccgc
240
cagccagtgg tcactctgcc cggcagatga cgagcggagg agagccacac atctcaacgg
300
gctccaggcg ccctcgaaaa ctgccctggc ctgctcaccc ccgatgcagt gcctgtcccc
360
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420
tcccacacgcg gttgct
436

<210> 3146
<211> 131
<212> PRT
<213> Homo sapiens

<400> 3146
Met Glu Lys Leu Arg Ser Lys Thr Pro Leu Gly Leu His Pro Lys Ser
1 5 10 15
Pro Ile Thr Ser Cys Ser Gly Gly Pro Ser Arg Thr Gly Gly Gly Gln
20 25 30
Thr Pro Arg Ser Pro Leu His Leu Pro Ser Gly Gly Cys Leu Lys Arg
35 40 45
Arg Leu Pro Pro Phe Thr His Leu Pro Ser Val Pro Gly Pro Pro Ser

50	55	60
Leu Val Cys Gln Thr Leu Gln Pro Pro Ala Ser Gly His Ser Ala Arg		
65	70	75
Gln Met Thr Ser Gly Gly Glu Pro His Ile Ser Thr Gly Ser Arg Arg		80
85	90	95
Pro Arg Lys Leu Pro Trp Pro Ala His Pro Arg Cys Ser Ala Cys Pro		
100	105	110
Pro Asn Val Val Ser Ser Arg Arg Arg Leu Thr Pro Arg Arg Gly Trp		
115	120	125
Gly Thr Ser		
130		

<210> 3147

<211> 3106

<212> DNA

<213> Homo sapiens

<400> 3147

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 120
 gccgagcgcg aggtgtcggt gcccaccctc agctgggagg agattcagaa gcataacctg
 180
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 240
 cagcacccgg ggggccagcg ggtcatcggt cactacgctg gagaagatgc aacggatgcc
 300
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 360
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 720
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 780
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 840
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 1020
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 1080

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1680
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1740
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1800
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1860
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1920
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1980
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2040
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2100
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 2820
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 2940
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 gaaccatag ggagctgatc gtaatgttta tcattttact tccccacccc tacataaaa
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 3106

<210> 3148
 <211> 444
 <212> PRT
 <213> Homo sapiens

<400> 3148
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 20 25 30
 Thr Asp Arg Trp Leu Val Ile Asp Arg Lys Val Tyr Asn Ile Thr Lys
 35 40 45
 Trp Ser Ile Gln His Pro Gly Gly Gln Arg Val Ile Gly His Tyr Ala
 50 55 60
 Gly Glu Asp Ala Thr Asp Ala Phe Arg Ala Phe His Pro Asp Leu Glu
 65 70 75 80
 Phe Val Gly Lys Phe Leu Lys Pro Leu Leu Ile Gly Glu Leu Ala Pro
 85 90 95
 Glu Glu Pro Ser Gln Asp His Gly Lys Asn Ser Lys Ile Thr Glu Asp
 100 105 110
 Phe Arg Ala Leu Arg Lys Thr Ala Glu Asp Met Asn Leu Phe Lys Thr
 115 120 125
 Asn His Val Phe Phe Leu Leu Leu Ala His Ile Ile Ala Leu Glu
 130 135 140
 Ser Ile Ala Trp Phe Thr Val Phe Tyr Phe Gly Asn Gly Trp Ile Pro
 145 150 155 160
 Thr Leu Ile Thr Ala Phe Val Leu Ala Thr Ser Gln Ala Gln Ala Gly
 165 170 175
 Trp Leu Gln His Asp Tyr Gly His Leu Ser Val Tyr Arg Lys Pro Lys
 180 185 190
 Trp Asn His Leu Val His Lys Phe Val Ile Gly His Leu Lys Gly Ala
 195 200 205
 Ser Ala Asn Trp Trp Asn His Arg His Phe Gln His His Ala Lys Pro
 210 215 220
 Asn Ile Phe His Lys Asp Pro Asp Val Asn Met Leu His Val Phe Val
 225 230 235 240
 Leu Gly Glu Trp Gln Pro Ile Glu Tyr Gly Lys Lys Lys Leu Lys Tyr
 245 250 255
 Leu Pro Tyr Asn His Gln His Glu Tyr Phe Phe Leu Ile Gly Pro Pro

260	265	270
Leu	Leu	Ile
Pro	Met	Tyr
Phe	Gln	Tyr
Gln	Ile	Ile
Met	Thr	Met
Tyr	Ile	Ile
275	280	285
Val	His	Lys
Asn	Trp	Val
Trp	Ala	Asp
Ala	Trp	Leu
Val	Ser	Tyr
Tyr	Tyr	Ile
290	295	300
Arg	Phe	Phe
Ile	Thr	Tyr
Ile	Pro	Phe
Phe	Tyr	Gly
Gly	Ile	Leu
Leu	Gly	Ala
305	310	315
320		
Leu	Phe	Leu
Asn	Phe	Ile
Ile	Arg	Phe
Phe	Leu	Glu
Glu	Ser	His
His	Trp	Phe
Phe	Val	Trp
325	330	335
Val	Thr	Gln
Gln	Met	Asn
Asn	His	Ile
Ile	Val	Met
Met	Glu	Ile
Glu	Asp	Gln
Gln	Glu	Ala
340	345	350
Arg	Asp	Trp
Trp	Phe	Ser
Ser	Ser	Gln
Gln	Leu	Thr
Leu	Ala	Thr
Thr	Cys	Asn
Cys	Asn	Val
Asn	Glu	Gln
355	360	365
Ser	Phe	Phe
Phe	Asn	Asp
Asp	Trp	Phe
Phe	Ser	Gly
Gly	His	Leu
Leu	Asn	Phe
Phe	Gln	Ile
370	375	380
His	His	Leu
Leu	Phe	Pro
Pro	Thr	Met
Met	Pro	Arg
Arg	His	Asn
His	Asn	Leu
Leu	His	Ile
Ile	Ala	
385	390	395
400		
Pro	Leu	Val
Val	Lys	Ser
Ser	Leu	Cys
Cys	Ala	Lys
Lys	His	Gly
Gly	Ile	Glu
Ile	Glu	Tyr
Tyr	Gln	Glu
405	410	415
Lys	Pro	Leu
Leu	Arg	Ala
Ala	Leu	Asp
Leu	Ile	Arg
Ile	Ile	Ser
Ser	Leu	Lys
Lys	420	430
Ser	Gly	Lys
Lys	Leu	Trp
Trp	Leu	Asp
Asp	Ala	Tyr
Tyr	Leu	His
His	Lys	
435	440	

<210> 3149

<211> 1006

<212> DNA

<213> Homo sapiens

<400> 3149

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180
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300
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420
480
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660
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acgtccgctt ccttaacatg gaaaccatgg ccctctgccca ctgaccacc accacccgg
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 840
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 960
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 1006

<210> 3150
 <211> 201
 <212> PRT
 <213> Homo sapiens

<400> 3150
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 Ala Pro Ala Ala Gly Thr Met Gly Ala Ala His Ser Ala Ser Glu Glu
 35 40 45
 Val Arg Glu Leu Glu Gly Lys Thr Gly Phe Ser Ser Asp Gln Ile Glu
 50 55 60
 Gln Leu His Arg Arg Phe Lys Gln Leu Ser Gly Asp Gln Pro Thr Ile
 65 70 75 80
 Arg Lys Glu Asn Phe Asn Asn Val Pro Asp Leu Glu Leu Asn Pro Ile
 85 90 95
 Arg Ser Lys Ile Val Arg Ala Phe Phe Asp Asn Arg Asn Leu Arg Lys
 100 105 110
 Gly Pro Ser Gly Leu Ala Asp Glu Ile Asn Phe Glu Asp Phe Leu Thr
 115 120 125
 Ile Met Ser Tyr Phe Arg Pro Ile Asp Thr Thr Met Asp Glu Glu Gln
 130 135 140
 Val Glu Leu Ser Arg Lys Glu Lys Leu Arg Phe Leu Phe His Met Tyr
 145 150 155 160
 Asp Ser Asp Ser Asp Gly Arg Ile Thr Leu Glu Glu Tyr Arg Asn Val
 165 170 175
 Lys Trp Ser Arg Ser Cys Cys Arg Glu Thr Leu Thr Ser Arg Arg Ser
 180 185 190
 Pro Leu Ala Pro Ser Pro Thr Gly Pro
 195 200

<210> 3151
 <211> 2079
 <212> DNA
 <213> Homo sapiens

<400> 3151
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 120

cctgggcctc tcgggtggagc agggacccga accggtgccc atccagtccg gtgccatctg
180
aagccccctt cccagaaaaat gagccacaga gcaagctgac cccagcgaca cagcccccca
240
gccctactat atttcgttc ctatcaaaaa atggatgact cgagacagg tttcaatctg
300
aaagtctgtcc tggtcagttt caagcagtgt ctgcgtgaga aggaagaggt cttgctggac
360
ccctacattg ccagctggaa gggcctggtc aggttctga acagcctggg caccatctc
420
tcattcatct ccaaggacgt ggtctccaag ctgcggatca tggagcgcct cagggggcgc
480
ccgcagacgc agcaactaccc cagcctgcag gccatggtgg cccacgagct gagcaaccgg
540
ctgggtggacc tggagggccg ctcccaccac cggaggtctg gctgccggac ggtgctgcgc
600
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660
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720
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780
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1320
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1380
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1560
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1740

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 1860
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 1920
 acctcggggt ggcagaggGA cggcccccAC ggcccAGCAG acatgcgAGC ttccagAGtg
 1980
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 2040
 ggggtgcaaa aaaaAGcaa aaaaaaaaaa aaaaaaaat
 2079

<210> 3152
<211> 214
<212> PRT
<213> Homo sapiens

<400> 3152
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Phe Lys Gln Cys Leu Asp Glu Lys Glu Glu Val Leu Leu Asp Pro Tyr
 20 25 30
Ile Ala Ser Trp Lys Gly Leu Val Arg Phe Leu Asn Ser Leu Gly Thr
 35 40 45
Ile Phe Ser Phe Ile Ser Lys Asp Val Val Ser Lys Leu Arg Ile Met
 50 55 60
Glu Arg Leu Arg Gly Gly Pro Gln Ser Glu His Tyr Arg Ser Leu Gln
 65 70 75 80
Ala Met Val Ala His Glu Leu Ser Asn Arg Leu Val Asp Leu Glu Gly
 85 90 95
Arg Ser His His Pro Glu Ser Gly Cys Arg Thr Val Leu Arg Leu His
 100 105 110
Arg Ala Leu His Trp Leu Gln Leu Phe Leu Glu Gly Leu Arg Thr Ser
 115 120 125
Pro Glu Asp Ala Arg Thr Ser Ala Leu Cys Ala Asp Ser Tyr Asn Ala
 130 135 140
Ser Leu Ala Ala Tyr His Pro Trp Val Val Arg Arg Ala Val Thr Val
 145 150 155 160
Ala Phe Cys Thr Leu Pro Thr Arg Glu Val Phe Leu Glu Ala Met Asn
 165 170 175
Val Gly Pro Pro Glu Gln Ala Val Gln Met Leu Gly Glu Ala Leu Pro
 180 185 190
Phe Ile Gln Arg Val Tyr Asn Val Ser Gln Lys Leu Tyr Ala Glu His
 195 200 205
Ser Leu Leu Asp Leu Pro
 210

<210> 3153
<211> 1498
<212> DNA
<213> Homo sapiens

<400> 3153

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120 cccactcagc aaccaacaag gaggaaagcc cccgcagtgc tcggccagtgc cccgcgcac
180 gccaccaggc agcgccccgc gcgcggtcca cgtggcagag gtcgcggcct cgcggcgccg
240 ggaggagccg cacgccacag tggcaggtcc caggccgtca ctccgagctc tcgccttcg
300 ggccgcgtgc cggcgtggc gggaggaggc gtctccggcg cgagcgcttgc accccggcgccg
360 agggctgcag cagcctccgc ttcaagcacag cagccactgt gtccctggctg tccgcgtgtgg
420 gcccccaagta gatgccttc cccgcgtcgga agtttctgtg cagccgtgtg cagagcgtgg
480 ccagggtgag cagcaccaggc aggaaggctca gggccatggc agcccaggcg gcctcttcag
540 tgccgtgggtt gggggccccgg gctgcggcgtg gagcgctgtc gcgcgaggaggc ccggggaaagc
600 ctgacttgaa cagacacagc cccctggctc gccttgcggc ttgggcacct gaggctctgt
660 cctggagctg gcattgcctc caggcgcccc cggcagcagg gagacagtgg gcacagatgg
720 ggcattactc tcccttaccag ggattcccgcatggactgc ttggccttca agctccctgg
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1200 agcataggcc aggagggcaa gctggagctt cagccaggga tgggcacagg ggtggtagag
1260 gaagggtgaca tcctcagcct gcccggcgt cactcgtgtg taggtcactc ttggtgacac
1320 ctgcggaggc agaggccaca ggctctcggt acaatggct cccgcctctc ccgcgggtcc
1380 agccatcacc tgtgggtcca aagcgaagag ttggggcgct ggacgaggcg aggccctgcc
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1498

<210> 3154
<211> 65
<212> PRT

<213> Homo sapiens

<400> 3154

Thr	Asp	Thr	Ala	Pro	Trp	Ala	Ala	Leu	Pro	Val	Gly	His	Leu	Ser	Leu
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															15
Cys	Pro	Gly	Ala	Gly	Ile	Ala	Ser	Arg	Arg	Pro	Arg	Gln	Gln	Gly	Asp
															30
Ser	Gly	His	Arg	Trp	Gly	Ile	Thr	Leu	Pro	Thr	Arg	Asp	Ser	Arg	His
															45
Gly	Leu	Leu	Gly	Leu	Gln	Ala	Pro	Trp	Gly	Ser	Arg	Gly	Lys	Pro	Gln
															60
Gly															
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<210> 3155

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3155

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120															
actaactgtg	actcttccttc	agaaggactg	gaaaaggaca	cagcaacaca	gagaagtgac										
180															
cagacttgcc	tagaaccatc	atgttcatgt	tcttctgaaa	atcaggaatg	ccagactgct										
240															
gccagccctg	ggaaatttct	ggaaattttg	aagaaaggga	aggcatttgt	tttagatatt										
300															
gacttggatt	tttttcagt	caagaatccc	ttcaaaaaaaaa	tgttcactca	ggaagagtac										
360															
aaaatcttac	aagagctgt	ccaatttaag	aaacctggca	ccaacctaac	agaggaagat										
420															
ttggtagata	ttgttgatac	tcgaattcat	caatttagagg	atttagaagc	cactttcgct										
480															
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540															
gaatcactag	t														
551															

<210> 3156

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3156

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Val	Ser	Ser	Ala	Lys	Lys	Pro	Lys	Leu	Ala	Leu	Glu	Asp	Ser	Glu	Asn
															30
Thr	Ala	Ser	Thr	Asn	Cys	Asp	Ser	Ser	Ser	Glu	Gly	Leu	Glu	Lys	Asp
															45
Thr	Ala	Thr	Gln	Arg	Ser	Asp	Gln	Thr	Cys	Leu	Glu	Pro	Ser	Cys	Ser

50	55	60
Cys Ser Ser Glu Asn Gln Glu Cys Gln	Thr Ala Ala Ser Pro Gly Glu	
65	70	75
Ile Leu Glu Ile Leu Lys Lys Gly Lys	Ala Phe Val Leu Asp Ile Asp	80
85	90	95
Leu Asp Phe Phe Ser Val Lys Asn Pro Phe Lys Lys Met Phe Thr Gln		
100	105	110
Glu Glu Tyr Lys Ile Leu Gln Glu Leu Tyr Gln Phe Lys Lys Pro Gly		
115	120	125
Thr Asn Leu Thr Glu Glu Asp Leu Val Asp Ile Val Asp Thr Arg Ile		
130	135	140
His Gln Leu Glu Asp Leu Glu Ala Thr Phe Ala Asp Leu Cys Asp Gly		
145	150	155
Asp Asp Glu Glu Thr Val Gln Gly Trp Ala Ser Asn Pro Gly Met Glu		160
165	170	175
Ser Leu		

<210> 3157

<211> 903

<212> DNA

<213> Homo sapiens

<400> 3157

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120
tctctggtag gacttctgtat ggtggggca cctccccagg tcacagtcca ggtgcaggc
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240
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300
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720
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900

cac
903

<210> 3158
<211> 92
<212> PRT
<213> Homo sapiens

<400> 3158
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Val Leu Ser Glu Lys Met Glu Pro Ser Ser Phe Gln Pro Leu Pro Glu
20 25 30
Thr Glu Pro Pro Thr Pro Glu Pro Gly Pro Lys Thr Pro Pro Arg Thr
35 40 45
Met Gln Glu Ser Pro Leu Gly Leu Gln Val Lys Glu Glu Ser Glu Val
50 55 60
Thr Glu Asp Ser Asp Phe Leu Glu Ser Gly Pro Leu Ala Ala Thr Gln
65 70 75 80
Glu Ser Val Pro Thr Leu Leu Pro Glu Glu Ala Gln
85 90

<210> 3159
<211> 2408
<212> DNA
<213> Homo sapiens

<400> 3159
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120
ccctggcaga ctaacgaagc agctcccttc ccaccccaac tgcaggtcta atttggacg
180
ctttgcctgc catttcttcc aggttgaggg agccgcagag gcggaggctc gcgtattcct
240
gcagtgcaga cccacgtcgc cccggacgc tcggtgctca ggcccttcgc gagcggggct
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360
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420
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480
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540
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720
gatgttagagc tgaaaagatc tgcagaatcc tgggctgaaa gttgcttgc ggaacatgg
780

cctgcaagct tgttccatc aattggacag aatttgggag cacactgggg aagatataagg
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900
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1020
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1080
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1140
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1260
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1320
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2100
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2160
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2220
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2280
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2340
aaaaataatc gactctaaaa ctgaaagaaa ctttatcaca ttttccccag ttcaatgcta
2400

tgc
ccat

2408

<210> 3160

<211> 431

<212> PRT

<213> Homo sapiens

<400> 3160

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	20							25					30		
Glu	Lys	Leu	Leu	Glu	Lys	Tyr	Met	Asp	Glu	Asp	Gly	Glu	Trp	Trp	Ile
	35							40				45			
Ala	Lys	Gln	Arg	Gly	Lys	Arg	Ala	Ile	Thr	Asp	Asn	Asp	Met	Gln	Ser
	50							55				60			
Ile	Leu	Asp	Leu	His	Asn	Lys	Leu	Arg	Ser	Gln	Val	Tyr	Pro	Thr	Ala
	65							70			75		80		
Ser	Asn	Met	Glu	Tyr	Met	Thr	Trp	Asp	Val	Glu	Leu	Glu	Arg	Ser	Ala
		85						90				95			
Glu	Ser	Trp	Ala	Glu	Ser	Cys	Leu	Trp	Glu	His	Gly	Pro	Ala	Ser	Leu
		100						105				110			
Leu	Pro	Ser	Ile	Gly	Gln	Asn	Leu	Gly	Ala	His	Trp	Gly	Arg	Tyr	Arg
		115						120				125			
Pro	Pro	Thr	Phe	His	Val	Gln	Ser	Trp	Tyr	Asp	Glu	Val	Lys	Asp	Phe
		130						135				140			
Ser	Tyr	Pro	Tyr	Glu	His	Glu	Cys	Asn	Pro	Tyr	Cys	Pro	Phe	Arg	Cys
	145			150					155				160		
Ser	Gly	Pro	Val	Cys	Thr	His	Tyr	Thr	Gln	Val	Val	Trp	Ala	Thr	Ser
		165						170				175			
Asn	Arg	Ile	Gly	Cys	Ala	Ile	Asn	Leu	Cys	His	Asn	Met	Asn	Ile	Trp
		180						185				190			
Gly	Gln	Ile	Trp	Pro	Lys	Ala	Val	Tyr	Leu	Val	Cys	Asn	Tyr	Ser	Pro
		195						200				205			
Lys	Gly	Asn	Trp	Trp	Gly	His	Ala	Pro	Tyr	Lys	His	Gly	Arg	Pro	Cys
		210						215				220			
Ser	Ala	Cys	Pro	Pro	Ser	Phe	Gly	Gly	Cys	Arg	Glu	Asn	Leu	Cys	
	225					230			235				240		
Tyr	Lys	Glu	Gly	Ser	Asp	Arg	Tyr	Tyr	Pro	Pro	Arg	Glu	Glu	Thr	
		245						250				255			
Asn	Glu	Ile	Glu	Arg	Gln	Gln	Ser	Gln	Val	His	Asp	Thr	His	Val	Arg
		260						265				270			
Thr	Arg	Ser	Asp	Asp	Ser	Ser	Arg	Asn	Glu	Val	Ile	Ser	Ala	Gln	Gln
		275						280				285			
Met	Ser	Gln	Ile	Val	Ser	Cys	Glu	Val	Arg	Leu	Arg	Asp	Gln	Cys	Lys
		290						295				300			
Gly	Thr	Thr	Cys	Asn	Arg	Tyr	Glu	Cys	Pro	Ala	Gly	Cys	Leu	Asp	Ser
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Lys	Ala	Lys	Val	Ile	Gly	Ser	Val	His	Tyr	Glu	Met	Gln	Ser	Ser	Ile
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Cys	Arg	Ala	Ala	Ile	His	Tyr	Gly	Ile	Ile	Asp	Asn	Asp	Gly	Gly	Trp
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Val	Asp	Ile	Thr	Arg	Gln	Gly	Arg	Lys	His	Tyr	Phe	Ile	Lys	Ser	Asn

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370	375	380
Thr Val Ser Lys Val Thr Val Gln Ala Val Thr Cys Glu Thr Thr Val		
385	390	395
Asp Ser Ser Val His Phe Ile Ser Leu Leu His Ile Ala Gln Glu Tyr		
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<211> 1197
<212> DNA
<213> Homo sapiens

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Gly Asp Leu Leu Phe Leu Phe Pro Ser Ser Leu Ala Gly Pro Ser Ser
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Glu Met Glu Thr Ser Val Pro Pro Gly Phe Lys Val Phe Gly Ala Pro
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Lys Ile Tyr Arg Ser Arg Asp Pro Gln Leu Cys Arg His Gly Pro Leu
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Gly Lys Cys Val His Cys Val Pro Leu Glu Pro Phe Asp Glu Asp Tyr
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Leu Asn His Leu Glu Pro Pro Val Lys His Met Ser Phe His Ala Tyr
130 135 140
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Thr Val Ala Asp Arg Phe Leu Asp Phe Trp Arg Lys Thr Gly Asn Gln
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His Phe Gly Tyr Leu Tyr Gly Arg Tyr Thr Glu His Lys Asp Ile Pro
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245 250 255
Gly Thr Gln Asn Ser Leu Glu Leu Leu Glu Asp Pro Lys Ala Glu Val
260 265 270
Val Asp Glu Ile Ala Ala Lys Leu Gly Leu Arg Lys Val Gly Trp Ile
275 280 285
Phe Thr Asp Leu Val Ser Glu Asp Thr Arg Lys Gly Thr Val Arg Tyr
290 295 300
Ser Arg Asn Lys Asp Thr Tyr Phe Leu Ser Ser Glu Glu Cys Ile Thr
305 310 315 320
Ala Gly Asp Phe Gln Asn Lys His Pro Asn Met Cys Arg Leu Ser Pro
325 330 335
Asp Gly His Phe Gly Ser Lys Phe Val Thr Ala Val Ala Thr Gly Gly
340 345 350
Pro Asp Asn Gln Val His Phe Glu Gly Tyr Gln Val Ser Asn Gln Cys

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<400> 3164

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Cys	Gly	Ser	Ser	Cys	Gly	Ser	Cys	Cys	Cys	Trp	Gly	Ser	Pro	Ser	Ala
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<211> 2413

<212> DNA

<213> Homo sapiens

<400> 3165

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<212> PRT
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<400> 3166

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 Gly Asn Glu Leu Pro Leu Ala Val Ala Ser Thr Ala Asp Leu Ile Arg
 85 90 95
 Cys Lys Leu Leu Asp Val Thr Gly Gly Leu Gly Thr Asp Glu Leu Arg
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 130 135 140
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 Lys Lys Met Pro His Ile Asn Asp Cys Arg Arg Gly Cys Tyr Phe Val
 165 170 175
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 180 185 190
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 Gln Lys Pro Glu Pro Gln Asp Asp Gly Lys Ser Thr Glu Ser Asp Val
 225 230 235 240
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 245 250 255
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 260 265 270
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 275 280 285
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 Asn Asp Val Leu Val Pro Lys Pro Phe Ser Gln Phe Trp Gln Pro Leu
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465	470	475
Glu Lys Leu Leu Arg Ile Cys Ser Ile Tyr Thr Gln Ser Gly Glu Asn		
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Phe Gly Ser Glu Ala Lys Ala Gln Gln Glu Glu Gln Gly Ser Val		
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Gln Val Glu Glu Glu Glu Asn Asp Asp Gln Glu Glu Glu Glu		
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Leu Ala Gln Lys Arg Gly Ala Leu Gln Gly Ser Ala Trp Gln Val Ser		
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Gln Thr Glu Asp Pro Ala Glu Leu Met Leu Glu Asn Tyr Asp Thr Met		
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Tyr Leu Leu Asp Gln Pro Val Leu Glu Gln Arg Leu Glu Pro Ser Thr		
660	665	670
Cys Lys Thr Asp Thr Leu Gly Leu Ser Cys Gly Val Gly Ser Gly Asn		
675	680	685
Cys Ser Asn Ser Ser Ser Asn Phe Glu Gly Leu Leu Trp Ser Gln		
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<211> 2730

<212> DNA

<213> Homo sapiens

<400> 3167

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 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 3168
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 Ser Tyr Ala Glu Glu Leu Ala Lys His Gly Met Lys Val Val Leu Ile
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 Asp Ile Tyr Asp Lys Ile Lys Thr Gly Leu Ala Gly Leu Glu Ile Gly
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 130 135 140
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<210> 3169

<211> 5945

<212> DNA

<213> Homo sapiens

<400> 3169

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 <211> 412
 <212> PRT
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<400> 3170
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 Pro Glu Gln Gln Met Ile Ala Asp Ile His Cys Met Ile Ala Ala Gly
 50 55 60
 Gln Asp Leu Asp Trp Ile Asp Ala Gln Gly Ala Thr Leu Leu His Ile
 65 70 75 80
 Ala Gly Ala Asn Gly Tyr Leu Arg Ala Ala Glu Leu Leu Leu Asp His
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 Gly Val Arg Val Asp Val Lys Asp Trp Asp Gly Trp Glu Pro Leu His
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 Ser Thr Tyr Asn Gly Asp Ile Arg Glu Thr Arg Thr Asp Gln Glu Asn
 225 230 235 240
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 Pro Thr Lys Ile Pro Arg Gly Glu Leu Asp Met Pro Val Glu Asn Gly
 260 265 270
 Leu Arg Ala Pro Val Ser Ala Tyr Gln Tyr Ala Leu Ala Asn Gly Asp

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290	295	300
Pro Gly Val Ala Asp Ala Thr Pro Pro Trp Ser Ser Tyr Lys Glu Gln		
305	310	315
Ser Pro Gln Thr Leu Leu Glu Leu Lys Arg Gln Arg Ala Ala Ala Lys		
325	330	335
Leu Leu Ser His Pro Phe Leu Ser Thr His Leu Gly Ser Ser Met Ala		
340	345	350
Arg Thr Gly Glu Ser Ser Ser Glu Gly Lys Ala Xaa Leu Ile Gly Gly		
355	360	365
Arg Thr Ser Pro Tyr Ser Ser Asn Gly Thr Ser Val Tyr Tyr Thr Val		
370	375	380
Thr Ser Gly Asp Pro Pro Leu Leu Lys Phe Lys Ala Pro Ile Glu Glu		
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<210> 3171

<211> 753

<212> DNA

<213> Homo sapiens

<400> 3171

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<211> 228

<212> PRT

<213> Homo sapiens

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 Ser Phe Leu Pro Ala Gln His Thr Val Gly Ser Pro Arg Asp Arg Lys
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 Pro Cys Arg Ala Gly Cys Phe Val Cys Arg Gln Ser Lys Gln Gln Leu
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 Glu Glu Glu Gln Lys Lys Ala Leu Tyr Gly Leu Glu Ala Ala Glu Asp
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 Val Glu Glu Trp Gln Val Val Cys Gly Lys Phe Leu Ala Ile Asn Ala
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 Thr Asn Met Ser Cys Ala Cys Arg Arg Ser Pro Arg Gly Leu Ser Pro
 180 185 190
 Ala Ala His Leu Gly Asp Gly Ser Ser Asp Leu Ile Leu Ile Arg Lys
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<210> 3173

<211> 573

<212> DNA

<213> Homo sapiens

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<210> 3174
 <211> 152
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 <213> Homo sapiens

<400> 3174
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 35 40 45
 Val Ala Gln Tyr Phe Arg Glu Lys Tyr Thr Leu Gln Leu Lys Tyr Pro
 50 55 60
 His Leu Pro Cys Leu Gln Val Gly Gln Glu Gln Lys His Thr Tyr Leu
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 Pro Leu Glu Val Cys Asn Ile Val Ala Gly Gln Arg Cys Ile Lys Lys
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 Leu Thr Asp Asn Gln Thr Ser Thr Met Ile Lys Ala Thr Ala Arg Ser
 100 105 110
 Ala Pro Asp Arg Gln Glu Glu Ile Ser Arg Leu Val Arg Ser Ala Asn
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<211> 92
<212> PRT
<213> Homo sapiens

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<210> 3177
<211> 1857
<212> DNA
<213> Homo sapiens

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 Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu
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 Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln
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Ser Arg Asn Ser Leu Thr Pro Ser Cys Pro Met Val Phe Met Ile Ala
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